

**BEFORE THE
PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA**

DOCKET NO. 2021-3-E

In the Matter of:)	
Annual Review of Base Rates)	
for Fuel Costs of)	
Duke Energy Carolinas, LLC, Increasing)	DIRECT TESTIMONY OF
Residential and Non-Residential Rates)	BRYAN L. SYKES FOR DUKE
		ENERGY CAROLINAS, LLC

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Bryan L. Sykes, and my business address is 550 South Tryon Street, Charlotte,
3 North Carolina.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am a Rates Manager supporting both Duke Energy Carolinas, LLC (“DEC” or the
6 “Company”) and Duke Energy Progress, LLC (“DEP”) (collectively, the “Companies”).

7 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**
8 **PROFESSIONAL EXPERIENCE.**

9 A. I received my Bachelor of Science and Master of Science Degrees in Accounting from East
10 Carolina University. I am a certified public accountant licensed in the State of North
11 Carolina. I began my career in 2001 with Arthur Andersen, LLP as a staff auditor. From
12 2001 until 2006, I held various roles in public accounting firms, including Grant Thornton,
13 LLP (successor to Arthur Andersen, LLP) and subsequently PricewaterhouseCoopers,
14 LLP. In 2006, I joined Progress Energy, Inc. as a financial auditor and subsequently held
15 a variety of positions in the accounting organization before and after the merger with Duke
16 Energy Corporation in 2012. I joined the Rates Department in 2019 as Manager, Rates and
17 Regulatory Filings.

18 **Q. HAVE YOU TESTIFIED BEFORE THIS COMMISSION IN ANY PRIOR**
19 **PROCEEDINGS?**

20 A. No.

21 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

22 A. The purpose of my testimony is to provide DEC’s actual fuel, capacity-related costs
23 including Public Utility Regulatory Policies Act of 1978 (“PURPA”) capacity,

1 environmental, and Distributed Energy Resource Program (“DERP”) cost data for June 1,
2 2020 through May 31, 2021 (the “review period”), the projected fuel, capacity-related
3 costs, environmental and DERP cost information for June 1, 2021 through September 30,
4 2021 (the “estimated period”), and DEC’s proposed fuel factors by customer class for
5 October 1, 2021 through September 30, 2022 (the “billing period”). I am providing thirteen
6 exhibits to support my testimony.

7 **Q. WHAT IS THE SOURCE OF THE ACTUAL INFORMATION AND DATA FOR**
8 **THE REVIEW PERIOD?**

9 A. Actual test period kilowatt hour (“kWh”) generation, kWh sales, fuel-related revenues,
10 fuel-related expenses, and DERP revenues and expenses were taken from DEC’s books
11 and records. These books, records, and reports of DEC are subject to review by the
12 appropriate regulatory agencies in the three jurisdictions that regulate DEC’s electric rates.

13 In addition, independent auditors perform an annual audit to provide assurance that,
14 in all material respects, internal accounting controls are operating effectively and DEC’s
15 financial statements are accurate.

16 **Q. DOES DEC PURCHASE POWER AND HOW ARE THESE COSTS RECORDED?**

17 A. Yes. The Company continuously evaluates purchasing power if it can be reliably procured
18 and delivered at a price that is less than the variable cost of DEC’s generation. In
19 accordance with S.C. Code Ann. § 58-27-865(A), DEC recovers from its South Carolina
20 retail customers an amount that is the lower of the purchase price or DEC’s avoided
21 variable cost for generating an equivalent amount of power for its economy purchases. The
22 Company also engages in economy purchases (and economy sales) with DEP as a result of
23 the Joint Dispatch Agreement (“JDA”).

1 The Company also purchases power from certain suppliers that are treated as firm
2 generation capacity purchases. In accordance with S.C. Code Ann. § 58-27-865(A)(2)(a),
3 all amounts paid to these suppliers are recorded as recoverable fuel costs with the exception
4 of capacity charges.

5 Finally, the Company routinely purchases power from qualifying facilities under
6 PURPA. According to Act 236, set forth in S.C. Code Ann. § 58-27-865(A), the avoided
7 cost payments for such purchases are included in fuel costs recoverable from South
8 Carolina retail customers

9 **Q. PLEASE EXPLAIN SYKES EXHIBIT NO. 1.**

10 A. Sykes Exhibit No. 1 is a summary of DEC's recommended fuel rate components for the
11 billing period. The components are: (1) base fuel costs, (2) capacity-related costs, (3)
12 DERP avoided costs, (4) variable environmental costs, and (5) DERP incremental costs.
13 These fuel rate components are supported by Sykes Exhibit Nos. 2 through 13 and
14 individually discussed further in my testimony.

15 The following table shows the rates and monthly charges proposed by the Company
16 in this proceeding as reflected in Sykes Exhibit No. 1. The DERP incremental cost
17 component is computed as a dollar amount per customer account since these amounts are
18 subject to per-account cost caps established by Act 236. All other fuel components are
19 computed as a rate per kWh.

Line No.	Description	Reference	Customer Class		
			Cents / kWh		
			Residential	General / Lighting	Industrial
	Base Fuel Costs				
1	Base Fuel Cost Component Under / (Over) at September 2021	Exhibit 2 Page 2	0.0431	0.0431	0.0431
2	Base Fuel Cost Component Projected Billing Period	Exhibit 3	1.5943	1.5943	1.5943
3	Total Base Fuel Cost Component	Line 1 + Line 2	1.6375	1.6375	1.6375
	Capacity-Related Costs				
			Cents / kWh		
4	PURPA Purchased Power Component Under / (Over) at September 2021	Exhibit 6 Page 2, 4, 6	0.0182	0.0175	0.0101
5	Capacity Related Cost Component Projected Billing Period	Exhibit 7	0.1167	0.0840	0.0588
6	Total Capacity Related Cost Component	Line 4 + Line 5	0.1349	0.1015	0.0689
	Distributed Energy Resource Program Avoided Costs				
			Cents / kWh		
7	DERP Avoided Costs Component Under / (Over) at September 2021	Exhibit 12 Page 2,4,6	(0.0011)	(0.0008)	(0.0006)
8	DERP Avoided Costs Component Projected Billing Period	Exhibit 13	0.0051	0.0037	0.0026
9	Total DERP Avoided Costs Component	Line 7 + Line 8	0.0040	0.0029	0.0020
	Environmental Costs				
			Cents / kWh		
10	Environmental Component Under / (Over) at September 2021	Exhibit 4 Page 2, 4, 6	(0.0104)	(0.0072)	(0.0059)
11	Environmental Component Projected Billing Period	Exhibit 5	0.0221	0.0159	0.0112
12	Total Environmental Component	Line 10 + 11	0.0117	0.0087	0.0053
13	Total Fuel Billing Factors	Sum Line 3 + Line 6 + Line 9 + Line 12	1.7881	1.7506	1.7137
	Distributed Energy Resource Program Incremental Cost per Account				
			Residential	General Service	Industrial
	DERP Incremental Under / (Over) at September 2021				
14	Annual Charge / (Credit)	Exhibit 9	\$ (0.87)	\$ (3.48)	\$ (203.38)
15	Monthly Charge / (Credit)	Exhibit 9	\$ (0.07)	\$ (0.29)	\$ (16.95)
	DERP Incremental Projected Billing Period				
16	Annual Charge	Exhibit 11	\$ 8.77	\$ 35.06	\$ 2,048.07
17	Monthly Charge	Exhibit 11	\$ 0.73	\$ 2.92	\$ 170.67
18	Total DERP Annual Charge - excluding GRT	Line 14 + Line 16	\$ 7.90	\$ 31.58	\$ 1,200.00
19	Total DERP Monthly Charge - excluding GRT	Line 15 + Line 17	\$ 0.66	\$ 2.63	\$ 100.00
20	Total DERP Annual Charge per account CAP		\$ 12.00	\$ 120.00	\$ 1,200.00
21	Total DERP Annual Charge - including GRT	Line 18 / (1-Tax Rate)	\$ 7.94	\$ 31.74	\$ 1,200.00
22	Total DERP Monthly Charge - including GRT	Line 19 / (1-Tax Rate)	\$ 0.66	\$ 2.64	\$ 100.00

Act 236 requires that capacity-related costs and avoided costs of distributed energy resource programs be tracked separately, allocated and recovered among customer classes using the same method that is used to allocate and recover variable environmental costs.

1 In addition, Sykes Exhibit No. 1 includes the billing period per-account charge per
2 month of \$0.66, \$2.64 and \$100.00, including Gross Receipts Tax (“GRT”), for South
3 Carolina Residential, General Service, and Industrial customers, respectively. The
4 monthly DERP incremental per-account charge recovers 100% of the DERP incremental
5 costs, in accordance with S.C. Code Ann. § 58-27-865(A)(1). Act 236 requires that the
6 incremental costs of DERP be allocated among customer classes using the same method
7 that is used to allocate variable environmental costs.

8 **Q. HOW DID DEC’S FUEL REVENUE BILLINGS COMPARE TO THE FUEL**
9 **COSTS INCURRED DURING THE JUNE 2020 – MAY 2021 TIME PERIOD?**

10 A. Sykes Exhibit No. 2 is a monthly comparison of fuel revenues collected from South
11 Carolina retail customers to the actual and estimated jurisdictional fuel costs attributable
12 to those sales. The Company currently estimates that its deferred base fuel cost balance
13 will be an under-collection of approximately \$9.4 million at September 30, 2021.

14 **Q. PLEASE EXPLAIN SYKES EXHIBIT NO. 3.**

15 A. Sykes Exhibit No. 3 presents DEC’s proposed base fuel rate of 1.5943¢/kWh for the billing
16 period to recover South Carolina’s retail share of approximately \$1.4 billion of projected
17 system fuel expense. The South Carolina retail share of approximately \$347 million
18 incorporates net metering avoided fuel benefits assigned fully to SC retail customers.

19 The fuel forecast supporting the projected fuel cost was generated by an hourly
20 dispatch model that considers the latest forecasted fuel prices, outages at the generating
21 plants based on planned maintenance and refueling schedules, forced outages based on
22 historical trends, generating unit performance parameters, and expected market conditions
23 associated with power purchase and off-system sales opportunities. In addition, the

1 forecasting model reflects the joint dispatch of the combined power supply resources of the
2 Companies.

3 **Q. PLEASE PROVIDE A STATUS UPDATE OF ENVIRONMENTAL COST**
4 **COLLECTION.**

5 A. During the review period, DEC recovered variable environmental costs and the costs of
6 emission allowances through the environmental component of the fuel rate. Environmental
7 costs allocated to the South Carolina retail jurisdiction during the review period were
8 approximately \$4.7 million, as shown by month on Sykes Exhibit No. 4. The Company
9 currently estimates that its deferred environmental cost balance will be an approximate
10 (over)-collection of \$(1.7) million at September 30, 2021.

11 **Q. HAVE YOU PROVIDED A FORECAST OF ENVIRONMENTAL COSTS?**

12 A. Yes, Sykes Exhibit No. 5 presents DEC's estimated system environmental costs for the
13 billing period of approximately \$14.2 million. The South Carolina retail portion is
14 projected to be approximately \$3.5 million.

15 **Q. PLEASE DESCRIBE EMISSION-REDUCING CHEMICALS THAT DEC**
16 **INCLUDED IN THE PROPOSED FUEL RATE IN THIS FILING.**

17 A. As Company witness Walsh explains more specifically in his testimony, DEC uses
18 emission-reducing chemicals at its fossil/hydro plants to help it provide low cost, reliable
19 electric generation for its customers while also complying with state and federal
20 environmental control obligations. As a result, DEC has included the cost of magnesium
21 hydroxide, calcium carbonate, ammonia, trona, urea, quicklime, limestone, lime and
22 hydrated lime incurred during the review period in its fuel cost recovery application.
23 Mercury and Air Toxics Standards chemicals that DEC can use to reduce emissions

1 include, but may not be limited to, activated carbon, mercury oxidation chemicals, and
2 mercury re-emission prevention chemicals.

3 **Q. HOW DID DEC ALLOCATE ENVIRONMENTAL COSTS?**

4 A. DEC allocated the South Carolina retail portion of environmental costs to Residential,
5 General Service/Lighting, and Industrial customer classes based upon the firm coincident
6 peak demand of each class for the prior year. The 2019 firm coincident peak demand was
7 used to allocate costs for the period June 2020 – December 2020, and the 2020 firm
8 coincident peak demand was used to allocate costs for the period January 2021 – September
9 2022. This allocation is shown on Sykes Exhibit Nos. 4 and 5.

10 Allocations were consistent with the methodology approved by this Commission in
11 Order No. 2007-674, issued in DEC's 2007 fuel review proceeding. This methodology has
12 been consistently used in each fuel case since the issuance of the 2007 Order.

13 **Q. PLEASE PROVIDE A STATUS UPDATE OF CAPACITY-RELATED COSTS**
14 **COLLECTION.**

15 A. During the review period, DEC recovered capacity-related costs, including PURPA
16 purchased power capacity costs and natural gas transportation (pipeline reservation/lease
17 costs) and storage costs through the capacity-related component of the fuel rate. Capacity-
18 related costs allocated to the South Carolina retail jurisdiction during the review period
19 were approximately \$18.9 million, as shown on Sykes Exhibit No. 6. The Company
20 currently estimates that its cumulative capacity-related cost balance will be an approximate
21 under-recovery of \$3.2 million at September 30, 2021.
22

1 **Q. HAVE YOU PROVIDED A FORECAST OF CAPACITY-RELATED COSTS?**

2 A. Yes. Sykes Exhibit No. 7 presents DEC's projected system capacity-related costs,
3 including PURPA purchased power capacity costs, natural gas transportation (pipeline
4 reservation/lease costs) and natural gas storage costs, for the billing period of
5 approximately \$74.4 million. The South Carolina retail portion is projected to be
6 approximately \$18.3 million.

7 **Q. HOW DID DEC ALLOCATE CAPACITY-RELATED COSTS?**

8 A. DEC allocated the South Carolina retail portion of capacity-related costs to Residential,
9 General Service/Lighting, and Industrial customer classes based upon the firm coincident
10 peak demand of each class for the prior year. The 2019 firm coincident peak demand was
11 used to allocate costs for the period of June 2020 – December 2020, and the 2020 firm
12 coincident peak demand was used to allocate costs for the period of January 2021 –
13 September 2022. This allocation is shown on Sykes Exhibit Nos. 6 and 7.

14 Allocations were consistent with the methodology approved by this Commission in
15 Order No. 2014–787, issued in DEC's 2014 fuel review proceeding. This methodology
16 has been consistently used in each fuel case since the issuance of the 2014 Order.

17 **Q. WHAT DERP INCREMENTAL COSTS ARE INCLUDED IN THIS FUEL**
18 **FILING?**

19 A. S.C. Code Ann. § 58-39-140(A) defines “incremental costs” as all reasonable and prudent
20 costs incurred by an electrical utility to implement a distributed energy resource program.
21 This filing includes the following categories of incremental costs:

- Costs associated with purchase power agreements in excess of the Company's avoided cost rate, including those serving the purchased power needs of the Shared Solar program;
- The DERP net energy metering ("NEM") Incentive, which is a credit available to eligible NEM customer-generators, approved in Docket No. 2014-246-E;
- Amortization of solar rebate balances given to South Carolina's Residential and Non-Residential customers to invest in or lease distributed generation;
- Carrying costs on unamortized solar rebate balances;
- An incentive utilized to lower the subscription charge customers pay to participate in the Shared Solar program;
- Avoided capacity costs and administrative costs associated with NEM, recoverable as an incremental cost;
- General and administrative costs, which include the cost of developing and implementing programs, incremental labor, and additional revenue-grade meters; and
- Carrying costs on under-collected balances due to per-account cost caps.

Q. PLEASE PROVIDE A STATUS UPDATE OF DERP INCREMENTAL COSTS COLLECTION.

A. During the review period, DEC recovered DERP incremental costs, offset by any revenues collected from program participants, through the DERP incremental cost per account charge. Review period DERP incremental costs were approximately \$9.2 million, as shown on Sykes Exhibit No. 8. The cumulative DERP incremental cost balance will be an (over)-collection balance of \$(1.8) million at May 31, 2021. The Company currently

1 estimates that the cumulative DERP incremental cost balance will be an (over)-collection
2 balance of approximately \$(1.0) million at September 30, 2021.

3 **Q. HOW DID DEC ALLOCATE DERP INCREMENTAL COSTS?**

4 A. DEC allocated 100% of DERP incremental costs to South Carolina Residential,
5 Commercial (General Service/Lighting), and Industrial customer classes based upon the
6 firm coincident peak demand of each class for the prior year.

7 One exception to this approach is the allocation of the avoided capacity costs
8 associated with NEM that is included in the DERP incremental costs. This particular
9 incremental cost has been allocated to the South Carolina retail jurisdiction based on its
10 pro rata share of system peak demand, rather than 100%. This DERP incremental cost is
11 related to system generation supply resources. Costs and benefits allocated with the system
12 generation supply resources are traditionally allocated among all of the Company's rate
13 jurisdictions since such generation supply resources are operated as a portfolio to serve its
14 native load customers in all rate jurisdictions.

15 The total cumulative (over)/under balance at September 30, 2021 was allocated
16 using the 2020 firm coincident peak demand. The estimated DERP incremental cost
17 balance at September 2022 was also allocated to the customer classes based on the 2020
18 firm coincident peak demand. This allocation is shown on Sykes Exhibit Nos. 9 and 11.
19 This allocation methodology was approved in Order No. 2015-505 in Docket 2015-55-E
20 and has been consistently applied since the issuance of the Order.

21 **Q. PLEASE EXPLAIN WHAT IS SHOWN ON SYKES EXHIBIT NO. 9.**

22 A. Sykes Exhibit No. 9 establishes the monthly charges by customer class for incremental
23 DERP (over)/under recovery. Each class's allocated portion of the estimated cumulative

1 incremental (over)/under recovery balance at September 30, 2021 was divided by the
2 projected number of accounts subject to the DERP per-account charge for each class. This
3 calculation results in an annual dollar per-account charge which is billed as a separate fixed
4 monthly component of the fuel factor by customer class. DEC proposes the per-account
5 monthly decrement for (over)-recovery of \$(0.07), \$(0.29) and \$(16.95) for South Carolina
6 Residential, Commercial (General Service/Lighting) and Industrial customers, excluding
7 GRT.

8 **Q. HAVE YOU PROVIDED A FORECAST OF DERP INCREMENTAL COSTS?**

9 A. Sykes Exhibit No. 10 itemizes DEC's projected DERP incremental costs by cost type and
10 month for the billing period. Total DERP incremental costs are projected to be
11 approximately \$10.4 million.

12 **Q. PLEASE EXPLAIN SYKES EXHIBIT NO. 11.**

13 A. Sykes Exhibit No. 11 presents the calculation of the prospective per-account charge by
14 customer class in order for DEC to recover DERP projected incremental costs. Each class's
15 allocated portion of the total DERP projected cost balance was divided by the projected
16 number of accounts subject to the DERP per-account charge for each class. This
17 calculation results in an annual dollar per-account charge which is billed monthly as part
18 of the fixed monthly component of the fuel factor by customer class. DEC has estimated
19 per-account charges per month of \$0.73, \$2.92 and \$170.67 for South Carolina Residential,
20 Commercial and Industrial customers, excluding GRT. Proposed rates are subject to per-
21 account cost caps.

1 **Q. HOW DOES THE COMPANY TREAT UNDER-COLLECTED DERP**
2 **INCREMENTAL COSTS RESULTING FROM REACHING THE PER ACCOUNT**
3 **COST CAP?**

4 A. Consistent with Docket No. 2015-55-E, Order No. 2015-515, the Company reallocates
5 under-collected DERP incremental costs in excess of the per-account cost caps among all
6 customer classes with carrying costs applied at the three-year treasury rate plus 65 basis
7 points. If applicable, interest calculated on the monthly under-collected balance is shown
8 as a separate incremental cost on Sykes Exhibit Nos. 8 and 10.

9 **Q. HAVE ANY CUSTOMER CLASSES REACHED THE DERP PER-ACCOUNT**
10 **CAP?**

11 A. Yes, the industrial customers reached the per-account cap in the prior year's filing. As a
12 result, for the billing period, proposed DERP incremental rates are limited to a monthly
13 per-account charge of \$100.00 for Industrial customers, including GRT.

14 **Q. WHAT DERP AVOIDED COSTS ARE INCLUDED IN THIS FILING?**

15 A. Avoided cost generally refers to the energy and capacity cost the utility avoids when buying
16 power from another entity rather than generating the power itself. Under PURPA,
17 payments made to qualifying facilities for power are based on avoided cost rates. In the
18 DERP context, S.C. Code Ann. § 58-39-140(A)(1) states that "avoided cost," as defined
19 for the purpose of differentiating DERP program costs between incremental costs and
20 avoided costs includes "all costs paid under avoided cost rates, or negotiated rates pursuant
21 to PURPA, which ever is lower." In S.C. Code Ann. § 58-39-120(B), avoided costs are
22 further defined, indicating that they are to be rates most recently approved by the
23 Commission, or negotiated pursuant to PURPA. Any amounts above avoided cost or above

1 negotiated rates pursuant to PURPA from DERP third-party purchases are treated as DERP
2 incremental costs in this filing.

3 **Q. PLEASE PROVIDE A STATUS UPDATE OF DERP AVOIDED COSTS**
4 **COLLECTIONS.**

5 A. During the review period, DEC recovered the DERP avoided costs of third-party
6 purchases, including the portion serving the purchased power needs of the Shared Solar
7 program, through the DERP avoided cost component of the fuel rate. As shown on Sykes
8 Exhibit No. 12, system DERP avoided costs during the review period were approximately
9 \$1.4 million, of which approximately \$339 thousand has been allocated to the South
10 Carolina retail jurisdiction. The total South Carolina retail share was allocated to the
11 classes as described below and was divided by projected sales to arrive at a cents per kWh
12 rate by customer class. The Company currently estimates that its South Carolina deferred
13 DERP avoided cost balance will be an (over)-collection of approximately \$(176) thousand
14 at September 30, 2021.

15 **Q. HOW DID THE COMPANY ALLOCATE DERP AVOIDED COSTS?**

16 A. DEC allocated DERP avoided costs based on the same method used by the utility to
17 allocate and recover variable environmental costs. As such, DEC allocated the South
18 Carolina Retail portion of DERP avoided costs to Residential, General Service/Lighting
19 and Industrial rate classes based upon the firm coincident peak demand of each class for
20 the prior year. The 2019 firm coincident peak demand was used to allocate costs for the
21 period June 2020 – December 2020, and the 2020 firm coincident peak demand was used
22 to allocate costs for the period January 2021 – September 2022.

1 The total cost allocated to each class is divided by projected sales to arrive at a cents
2 per kWh. This allocation is shown on Sykes Exhibit Nos. 12 and 13.

3 **Q. HAVE YOU PROVIDED A FORECAST OF DERP AVOIDED COSTS?**

4 A. Yes, Sykes Exhibit No. 13 provides DEC's projected system DERP avoided cost for the
5 billing period of approximately \$3.3 million. The South Carolina retail portion is projected
6 to be approximately \$799 thousand.

7 **Q. ARE THERE OTHER ADJUSTMENTS TO THE EXHIBITS WHICH HAVE NOT**
8 **BEEN EXPLAINED?**

9 A. Yes. There are two adjustments being made on Sykes Exhibit No. 2, page 1. The first
10 adjustment occurs in the month of March 2021 and includes a review period reduction of
11 \$1,474,147. This adjustment corrects the pricing applied to joint dispatch transfers of solar
12 generation from DEP to DEC via the JDA. As explained in Dana Harrington's testimony
13 in the DEP fuel proceeding in Docket No. 2021-1-E, in preparation for the rollout of
14 additional solar facilities, a new dataset was programmed into the JDA software using a
15 placeholder price. Once transfers of energy under this dataset occurred, the placeholder
16 price was inadvertently not updated to the appropriate price, resulting in an overstatement
17 of expenses from JDA purchases.

18 The second adjustment occurs in the month of May 2021 and includes a review
19 period reduction of \$325,381 to remove South Carolina's share of the total delivered costs
20 on economy purchases of electric power in excess of DEC's avoided variable costs for the
21 generation of an equivalent quantity of electric power in accordance with S.C. Code Ann.
22 § 58-27-865(A)(2)(b) of the South Carolina fuel statute.

1 **Q. DO YOU BELIEVE DEC'S ACTUAL FUEL COSTS INCURRED DURING THE**
2 **PERIOD WERE REASONABLE?**

3 A. Yes. I believe the costs were reasonable and that DEC met the criteria set forth in S.C.
4 Code Ann. § 58-27-865. These costs also reflect DEC's continuing efforts to maintain
5 reliable service and an economical generation mix, thereby minimizing the total cost of
6 providing service to DEC's South Carolina retail customers.

7 **Q. DO YOU BELIEVE DEC'S ACTUAL DERP COSTS INCURRED DURING THE**
8 **PERIOD WERE REASONABLE?**

9 A. Yes. I also believe that the DERP costs were reasonable and that DEC met the criteria set
10 forth in S.C. Code Ann. § 58-39-130(A)(2).

11 **Q. WHAT ARE THE KEY DRIVERS IMPACTING THE PROPOSED FUEL**
12 **FACTOR?**

13 A. A number of factors contribute to the change in the proposed total fuel cost factors for all
14 customer classes. Total fuel rates projected for the billing period are increasing primarily
15 due to an expected under-collection of fuel costs as of September 30, 2021 included in the
16 2021 proposed fuel rates rather than the over-collection of fuel costs reflected in existing
17 rates. This change from an over-collection to an under-collection is the most significant
18 component of the billing period rate increase.

19 **Q. INCLUDING THE DERP INCREMENTAL PER ACCOUNT CHARGES, WHAT**
20 **IS THE IMPACT TO CUSTOMERS' BILLS IF THE PROPOSED FUEL COST,**
21 **CAPACITY-RELATED COST, DERP AVOIDED COST, AND**
22 **ENVIRONMENTAL COST FACTORS ARE APPROVED BY THE**
23 **COMMISSION?**

1 A. The impact of all components of this filing to the monthly bill of a typical Residential
2 customer using 1000 kWh per month is an increase of \$1.81, or 1.55%. The impacts for
3 average General Service, Lighting and Industrial customers vary by customer, but are
4 approximately an increase of 1.37%, 0.70% and 2.25%, respectively.

5 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

6 A. Yes, it does.

Sykes Exhibit 1
Docket No 2021-3-E

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF TOTAL FUEL BILLING FACTORS
BILLING PERIOD OCTOBER 1, 2021 TO SEPTEMBER 30, 2022

Line No.	Description	Reference	Customer Class		
			Cents / kWh		
			Residential	General / Lighting	Industrial
Base Fuel Costs					
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Capacity-Related Costs					
4	PURPA Purchased Power Component Under / (Over) at September 2021	Exhibit 6 Page 2, 4, 6	0.0182	0.0175	0.0101
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Distributed Energy Resource Program Avoided Costs					
7	DERP Avoided Costs Component Under / (Over) at September 2021	Exhibit 12 Page 2,4,6	(0.0011)	(0.0008)	(0.0006)
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Environmental Costs					
10	Environmental Component Under / (Over) at September 2021	Exhibit 4 Page 2, 4, 6	(0.0104)	(0.0072)	(0.0059)
11	Environmental Component Projected Billing Period	Exhibit 5	0.0221	0.0159	0.0112
12	Total Environmental Component	Line 10 + 11	0.0117	0.0087	0.0053
13	Total Fuel Billing Factors	Sum Line 3 + Line 6 + Line 9 + Line 12	1.7881	1.7506	1.7137

Distributed Energy Resource Program Incremental Cost per Account

			General		
			Residential	Service	Industrial
DERP Incremental Under / (Over) at September 2021					
14	Annual Charge / (Credit)	Exhibit 9	\$ (0.87)	\$ (3.48)	\$ (203.38)
15	Monthly Charge / (Credit)	Exhibit 9	\$ (0.07)	\$ (0.29)	\$ (16.95)
DERP Incremental Projected Billing Period					
16	Annual Charge	Exhibit 11	\$ 8.77	\$ 35.06	\$ 2,048.07
17	Monthly Charge	Exhibit 11	\$ 0.73	\$ 2.92	\$ 170.67
18	Total DERP Annual Charge - excluding GRT	Line 14 + Line 16	\$ 7.90	\$ 31.58	\$ 1,200.00
19	Total DERP Monthly Charge - excluding GRT	Line 15 + Line 17	\$ 0.66	\$ 2.63	\$ 100.00
20	Total DERP Annual Charge per account CAP		\$ 12.00	\$ 120.00	\$ 1,200.00
21	Total DERP Annual Charge - including GRT	Line 18 / (1-Tax Rate)	\$ 7.94	\$ 31.74	\$ 1,200.00
22	Total DERP Monthly Charge - including GRT	Line 19 / (1-Tax Rate)	\$ 0.66	\$ 2.64	\$ 100.00

Totals may not sum due to rounding

Billing Rate \$ **99.49**

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF BASE FUEL (OVER) / UNDER RECOVERY
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.	Description	Reference	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020
1	Coal		\$ 64,579,931	\$ 83,095,022	\$ 90,221,547	\$ 41,857,376	\$ 27,253,247	\$ 31,995,275
2	Gas		22,345,047	29,943,913	29,698,240	28,308,519	25,300,041	28,161,371
3	Nuclear Fuel		22,500,128	23,292,114	23,253,997	20,430,163	17,540,623	19,850,066
4	Purchased Power		16,131,181	26,314,345	19,694,276	20,105,736	28,212,035	15,436,318
5	Fuel Expense Recovered Through Intersystem Sales		(2,074,640)	(829,449)	(5,051,116)	(1,050,852)	(1,221,267)	(4,759,156)
6	Total Fuel Costs	Sum Lines 1 - 5	\$ 123,481,648	\$ 161,815,946	\$ 157,816,944	\$ 109,650,941	\$ 97,084,679	\$ 90,683,873
7	Eliminate Avoided Fuel Benefit of SC NEM		356,654	359,526	363,328	368,362	324,857	276,212
8	Adjusted System Fuel costs	Line 6 + Line 7	\$ 123,838,302	\$ 162,175,472	\$ 158,180,272	\$ 110,019,303	\$ 97,409,536	\$ 90,960,085
9	Total System kWh Sales		6,734,780,109	8,102,605,011	8,443,024,842	7,621,343,554	6,216,478,500	7,066,717,933
10	Eliminate NEM Solar Generation kWhs		10,965,044	11,053,324	11,170,183	11,324,951	10,940,319	10,419,881
11	Adjusted Projected System kWh Sales	Line 9 + Line 10	6,745,745,153	8,113,658,335	8,454,195,025	7,632,668,505	6,227,418,819	7,077,137,814
12	System cost ¢/kWh	Line 8 / Line 11 * 100	1.8358	1.9988	1.8710	1.4414	1.5642	1.2853
13	Actual/Projected SC Retail Sales kWh (w/solar)		1,623,613,976	1,916,998,453	2,010,846,771	1,877,139,122	1,509,190,428	1,758,086,136
14	Eliminate the NEM impact of Solar Generation kWhs	Line 10	10,965,044	11,053,324	11,170,183	11,324,951	10,940,319	10,419,881
15	Adjusted Actual/Projected SC Retail Sales kWh (w/o solar)	Line 13 + Line 14	1,634,579,020	1,928,051,777	2,022,016,954	1,888,464,073	1,520,130,747	1,768,506,017
16	SC Base Fuel Costs	Line 12 * Line 15 /100	\$ 30,007,580	\$ 38,537,820	\$ 37,832,483	\$ 27,220,821	\$ 23,777,946	\$ 22,730,017
17	Assign 100% of avoided fuel benefit of SC NEM	-Line 7	(356,654)	(359,526)	(363,328)	(368,362)	(324,857)	(276,212)
18	Adjusted SC Base Fuel Costs	Line 16 + Line 17	\$ 29,650,926	\$ 38,178,294	\$ 37,469,155	\$ 26,852,459	\$ 23,453,089	\$ 22,453,805
19	Adjusted SC Cost per kWh (¢/kWh)	Line 18 / Line 15 * 100	1.8140	1.9801	1.8531	1.4219	1.5428	1.2696
20	Fuel Costs Collected - non capacity revenue	Company Record	\$ 34,365,414	\$ 40,575,189	\$ 42,561,583	\$ 39,731,527	\$ 27,431,905	\$ 26,415,244
21	Fuel Benefit given in SC NEM Incentive		(125,954)	(126,961)	(128,293)	(130,059)	(84,211)	(70,052)
22	Adjusted Fuel Costs Collected	Line 20 + Line 21	\$ 34,239,460	40,448,228	42,433,290	\$ 39,601,468	27,347,694	26,345,192
23	(Over)/Under Current Month	Line 18 - Line 22	\$ (4,588,534)	\$ (2,269,934)	\$ (4,964,135)	\$ (12,749,009)	\$ (3,894,605)	\$ (3,891,387)
24	(Over) / Under Cumulative Balance May 2020	Prior Year Annual Filing	\$ 8,256,490	-	-	-	-	-
25	Accounting Adjustment(s)		-	-	-	-	-	-
26	(Over)/Under Cumulative Balance	Line 23 + Line 24 + PM cumulative balance	\$ 3,667,956	\$ 1,398,022	\$ (3,566,113)	\$ (16,315,122)	\$ (20,209,727)	\$ (24,101,114)

Line No.	Description	Reference	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	Twelve Months Ended May 2021
27	Coal		\$ 42,596,286	\$ 47,641,206	\$ 54,840,730	\$ 32,716,607	\$ 43,249,197	\$ 42,620,354	\$ 602,666,778
28	Gas		32,836,409	46,281,316	44,130,569	31,311,683	20,758,057	25,519,165	364,594,331
29	Nuclear Fuel		22,919,977	22,914,352	20,166,501	22,670,888	21,196,150	22,764,497	259,499,456
30	Purchased Power		39,153,580	23,859,789	32,411,492	16,386,222	12,185,944	19,210,488	269,101,407
31	Fuel Expense Recovered Through Intersystem Sales		(3,518,671)	(2,978,721)	(6,594,079)	(7,366,984)	(5,224,560)	(7,161,696)	(47,831,191)
32	Total Fuel Costs	Sum Lines 27 - 31	\$ 133,987,581	\$ 137,717,942	\$ 144,955,213	\$ 95,718,416	\$ 92,164,788	\$ 102,952,808	\$ 1,448,030,781
33	Eliminate Avoided Fuel Benefit of SC NEM		277,301	281,141	281,874	289,067	289,067	289,067	3,756,455
34	Adjusted System Fuel costs	Line 32 + Line 33	\$ 134,264,882	\$ 137,999,083	\$ 145,237,087	\$ 96,007,484	\$ 92,453,855	\$ 103,241,875	\$ 1,451,787,236
35	Total System kWh Sales (w/solar)		6,272,969,895	8,612,692,842	7,023,124,257	6,159,528,696	6,262,731,991	5,739,755,562	84,255,753,192
36	Eliminate NEM Solar Generation kWhs		10,483,803	10,628,974	10,656,826	10,744,888	10,836,789	10,836,789	130,061,771
37	Adjusted Projected System kWh Sales (w/o solar)	Line 35 + Line 36	6,283,453,698	8,623,321,816	7,033,781,083	6,170,273,584	6,273,568,780	5,750,592,351	84,385,814,963
38	System cost ¢/kWh	Line 34 / Line 37 * 100	2.1368	1.6003	2.0649	1.5560	1.4737	1.7953	
39	Actual/Projected SC Retail Sales kWh (w/solar)		1,386,684,247	2,046,721,244	1,610,951,313	1,377,957,373	1,468,606,143	1,396,012,579	19,982,807,784
40	Eliminate the NEM impact of Solar Generation kWhs	Line 36	10,483,803	10,628,974	10,656,826	10,744,888	10,836,789	10,836,789	130,061,771
41	Adjusted Actual/Projected SC Retail Sales kWh (w/o solar)	Line 39 + Line 40	1,397,168,050	2,057,350,218	1,621,608,139	1,388,702,261	1,479,442,932	1,406,849,368	20,112,869,555
42	SC Base Fuel Costs	Line 38 * Line 41 /100	\$ 29,854,697	\$ 32,923,791	\$ 33,483,790	\$ 21,607,762	\$ 21,802,615	\$ 25,257,532	\$ 345,036,855
43	Assign 100% of avoided fuel benefit of SC NEM	-Line 33	(277,301)	(281,141)	(281,874)	(289,067)	(289,067)	(289,067)	(3,756,455)
44	Adjusted SC Base Fuel Costs	Line 42 + Line 43	\$ 29,577,396	\$ 32,642,650	\$ 33,201,916	\$ 21,318,695	\$ 21,513,548	\$ 24,968,465	\$ 341,280,398
45	Adjusted SC Cost per kWh (¢/kWh)	Line 44 / Line 41*100	2.1170	1.5866	2.0475	1.5352	1.4542	1.7748	1.6968
46	Fuel Costs Collected - non capacity revenue	Company Records	\$ 20,834,931	\$ 30,751,988	\$ 24,204,543	\$ 20,703,810	\$ 22,065,808	\$ 20,975,089	\$ 350,617,031
47	Fuel Benefit given in SC NEM Incentive		(41,745)	(42,325)	(42,293)	(42,717)	(43,088)	(43,088)	(920,786)
48	Adjusted Fuel Costs Collected	Line 46 + Line 47	\$ 20,793,186	\$ 30,709,663	\$ 24,162,250	\$ 20,661,093	\$ 22,022,720	\$ 20,932,001	\$ 349,696,245
49	(Over)/Under Current Month	Line 44 - Line 48	\$ 8,784,210	\$ 1,932,987	\$ 9,039,666	\$ 657,602	\$ (509,172)	\$ 4,036,464	\$ (8,415,847)
50	Accounting Adjustment(s)		-	-	-	(1,474,147)	-	(325,381)	(1,799,528)
51	(Over)/Under Cumulative Balance	Line 49 + Line 50 + PM cumulative balance	\$ (15,316,904)	\$ (13,383,917)	\$ (4,344,251)	\$ (5,160,796)	\$ (5,669,968)	\$ (1,958,886)	\$ (1,958,885)

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF BASE FUEL (OVER) / UNDER RECOVERY
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.	Description	Reference	Estimated June 2021	Estimated July 2021	Estimated August 2021	Estimated September 2021	Sixteen Months Ended September 2021
52	Coal		\$ 51,129,020	\$ 38,620,092	\$ 38,302,898	\$ 23,879,100	\$ 754,597,888
53	Gas		25,719,559	57,170,401	53,673,522	52,350,835	\$ 553,508,647
54	Nuclear Fuel		22,764,466	23,862,620	23,449,431	19,219,442	\$ 348,795,415
55	Purchased Power		21,383,418	30,989,626	25,230,757	24,620,018	\$ 371,325,225
56	Fuel Expense Recovered Through Intersystem Sales		(1,028,256)	(1,153,751)	(1,439,325)	(494,316)	\$ (51,946,839)
57	Total Fuel Costs	Sum of Lines 52-56	\$ 119,968,206	\$ 149,488,988	\$ 139,217,283	\$ 119,575,078	\$ 1,976,280,336
58	Eliminate Avoided Fuel Benefit of SC NEM		248,353	248,251	248,146	248,040	\$ 4,749,246
59	Adjusted System Fuel costs	Line 57 + Line 58	\$ 120,216,559	\$ 149,737,240	\$ 139,465,429	\$ 119,823,119	\$ 1,981,029,582
60	Total Projected System kWh Sales (w/solar)		7,025,575,203	8,271,350,711	8,670,278,197	8,040,495,325	116,263,452,627
61	Eliminate NEM Solar Generation kWhs		9,391,485	9,387,626	9,383,640	9,379,656	167,604,177
62	Adjusted Projected System kWh Sales(w/o solar)	Line 60 and 61	7,034,966,687	8,280,738,336	8,679,661,837	8,049,874,981	116,431,056,805
63	System cost ¢/kWh	Line 59 / Line 62 * 100	1.7088	1.8083	1.6068	1.4885	
64	Estimated SC Retail Sales kWh (w/solar)		1,721,298,717	1,995,059,533	2,115,058,217	1,995,845,841	27,810,070,092
65	Eliminate NEM Solar Generation kWhs		9,391,485	9,387,626	9,383,640	9,379,656	167,604,177
66	Adjusted Estimated SC Retail Sales kWh (w/o solar)	Line 64 + Line 65	1,730,690,201	2,004,447,159	2,124,441,857	2,005,225,497	27,977,674,269
67	SC Base Fuel Costs	Line 63 * Line 66 / 100	\$ 29,574,784	\$ 36,245,607	\$ 34,135,684	\$ 29,847,963	\$ 474,840,893
68	Assign 100% of avoided fuel benefit of SC NEM	- Line 58	(248,353)	(248,251)	(248,146)	(248,040)	\$ (4,749,246)
69	Adjusted SC Base Fuel Costs	Line 67 + Line 68	\$ 29,326,431	\$ 35,997,355	\$ 33,887,538	\$ 29,599,923	\$ 470,091,647
70	Adjusted SC Cost per kWh (¢/kWh)	Line 69 / Line 66 * 100	1.6945	1.7959	1.5951	1.4761	1.6802
71	Estimated Base Fuel Cost Collected	Line 64 * 1.5025 / 100	\$ 25,862,513	\$ 29,975,769	\$ 31,778,750	\$ 29,987,584	\$ 468,221,647
72	Fuel Benefit given in SC NEM Incentive		(37,778)	(37,763)	(37,747)	(37,731)	\$ (1,071,805)
73	Adjusted Fuel Costs Collected	Line 71 + Line 72	\$ 25,824,735	\$ 29,938,007	\$ 31,741,003	\$ 29,949,853	\$ 467,149,842
74	(Over)/Under Current Month	Line 69 - Line 73	\$ 3,501,696	\$ 6,059,349	\$ 2,146,535	\$ (349,930)	\$ 2,941,803
75	Accounting Adjustment(s)		-	-	-	-	(1,799,528)
76	(Over)/Under Cumulative Balance	PM + Sum Lines 74 - 75	\$ 1,542,811	\$ 7,602,160	\$ 9,748,695	\$ 9,398,765	\$ 9,398,765
77	Projected SC Retail Sales kWhs (October 2021 -September 2022)	Exhibit 3					21,792,522,023
78	SC Base Fuel Rate (cents / kWh)	Line 76 / Line 77 * 100					0.0431

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF PROJECTED BILLING PERIOD BASE FUEL COSTS BILLING FACTORS
FOR THE 12 MONTHS OCTOBER 2021 TO SEPTEMBER 2022

Description	Reference	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022
Coal		\$ 17,501,709	\$ 29,722,389	\$ 40,757,425	\$ 61,223,146	\$ 57,532,351	\$ 20,348,873
Gas		37,607,022	32,925,068	38,583,972	38,312,670	32,119,926	33,106,415
Nuclear Fuel		19,789,892	19,477,569	23,727,520	24,632,661	22,174,472	23,528,886
Purchased Power		25,777,280	33,269,623	24,241,475	16,618,348	17,049,508	26,257,168
Fuel Expense Recovered Through Intersystem Sales		(671,243)	(19,669)	(1,704,622)	(5,807,220)	(3,832,286)	(962,866)
Total Fuel Costs	Sum Lines 1 - 5	\$ 100,004,660	\$ 115,374,980	\$ 125,605,769	\$ 134,979,607	\$ 125,043,971	\$ 102,278,476
Eliminate Avoided Fuel Benefit of SC NEM		247,939	247,833	247,731	247,626	247,521	247,426
Adjusted System Fuel costs	Line 6 + Line 7	\$ 100,252,599	\$ 115,622,813	\$ 125,853,501	\$ 135,227,233	\$ 125,291,492	\$ 102,525,902
Total Projected System Sales kWhs (w/solar)		6,742,888,463	6,307,192,256	7,057,992,507	7,912,246,762	7,911,930,175	7,308,710,605
Eliminate NEM Solar Generation kWhs		9,375,802	9,371,821	9,367,971	9,363,993	9,360,018	9,356,428
Adjusted Projected System kWh Sales(w/o solar)	Line 9 + Line 10	6,752,264,266	6,316,564,077	7,067,360,478	7,921,610,756	7,921,290,193	7,318,067,034
System Cost per kWh (¢/kWh)	Line 8 / Line 11 * 100	1.4847	1.8305	1.7808	1.7071	1.5817	1.4010
Adjusted Projected SC Retail Sales kWhs(w/ solar)		1,681,017,970	1,565,964,290	1,701,385,791	1,899,113,156	1,931,892,536	1,811,608,024
Eliminate the NEM impact kWh	Line 10	9,375,802	9,371,821	9,367,971	9,363,993	9,360,018	9,356,428
Adjusted Projected SC Retail Sales kWhs(w/o solar)	Line 13 + Line 14	1,690,393,772	1,575,336,111	1,710,753,761	1,908,477,150	1,941,252,553	1,820,964,452
SC Base Fuel Costs	Line 13 * Line 12 / 100	\$ 25,097,710	\$ 28,836,056	\$ 30,464,606	\$ 32,578,991	\$ 30,704,901	\$ 25,511,658
Assign 100% of Avoided Fuel Benefit of SC NEM	- Line 7	(247,939)	(247,833)	(247,731)	(247,626)	(247,521)	(247,426)
Recognize Fuel Benefits Given in DER NEM Incentive		(37,715)	(37,699)	(37,684)	(37,668)	(37,652)	(37,637)
Adjusted SC Base Fuel Costs	Sum Lines 16 - 18	\$ 24,812,056	\$ 28,550,523	\$ 30,179,190	\$ 32,293,697	\$ 30,419,728	\$ 25,226,595
Adjusted SC Cost per kWh (¢/kWh)	Line 19 / Line 15 * 100	1.4678	1.8123	1.7641	1.6921	1.5670	1.3853

Description	Reference	April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	Billing Period Twelve Months Ended September 2022
Coal		\$ 6,216,080	\$ 7,395,138	\$ 12,631,954	\$ 22,661,034	\$ 19,273,760	\$ 11,999,461	\$ 307,263,322
Gas		45,005,844	49,200,552	62,403,468	71,567,099	67,304,070	61,694,575	569,830,682
Nuclear Fuel		19,034,895	21,881,802	23,191,648	23,498,931	24,139,278	19,557,964	264,635,518
Purchased Power		26,309,778	22,746,021	23,285,276	31,971,979	26,396,010	24,492,806	298,415,272
Fuel Expense Recovered Through Intersystem Sales		(803,469)	(2,589,674)	(2,089,157)	(1,542,081)	(1,663,930)	(1,362,547)	(23,048,766)
Total Fuel Costs	Sum Lines 21 - 25	\$ 95,763,128	\$ 98,633,838	\$ 119,423,189	\$ 148,156,962	\$ 135,449,189	\$ 116,382,259	\$ 1,417,096,027
Eliminate Avoided Fuel Benefit of SC NEM		247,321	247,220	247,115	247,013	246,908	246,803	2,968,456
Adjusted System Fuel costs	Line 26 + Line 27	\$ 96,010,449	\$ 98,881,058	\$ 119,670,303	\$ 148,403,975	\$ 135,696,097	\$ 116,629,062	\$ 1,420,064,484
Total Projected System Sales kWhs (w/solar)		6,605,549,360	6,323,257,933	7,091,353,562	8,292,665,926	8,744,695,201	8,162,715,217	88,461,197,969
Eliminate NEM Solar Generation kWhs		9,352,456	9,348,613	9,344,644	9,340,804	9,336,839	9,332,874	112,252,264
Adjusted Projected System kWh Sales(w/o solar)	Line 29 + Line 30	6,614,901,816	6,332,606,546	7,100,698,206	8,302,006,731	8,754,032,040	8,172,048,091	88,573,450,233
System Cost per kWh (¢/kWh)	Line 28 / Line 31 *100	1.4514	1.5615	1.6853	1.7876	1.5501	1.4272	
Adjusted Projected SC Retail Sales kWhs(w/ solar)		1,680,073,577	1,597,214,069	1,744,026,999	2,007,613,415	2,140,844,520	2,031,767,676	21,792,522,023
Eliminate the NEM impact kWh	Line 30	9,352,456	9,348,613	9,344,644	9,340,804	9,336,839	9,332,874	112,252,264
Adjusted Projected SC Retail Sales kWhs(w/o solar)	Line 33 + Line 34	1,689,426,033	1,606,562,682	1,753,371,643	2,016,954,220	2,150,181,358	2,041,100,551	21,904,774,287
SC Base Fuel Costs	Line 33 / 100 * Line 32	\$ 24,520,780	\$ 25,085,818	\$ 29,550,125	\$ 36,054,418	\$ 33,329,923	\$ 29,129,986	\$ 350,864,971
Assign 100% of Avoided Fuel Benefit of SC NEM	- Line 27	(247,321)	(247,220)	(247,115)	(247,013)	(246,908)	(246,803)	(2,968,456)
Recognize Fuel Benefits Given in DER NEM Incentive		(37,621)	(37,606)	(37,590)	(37,574)	(37,559)	(37,543)	(451,548)
Adjusted SC Base Fuel Costs	Sum Lines 36 - 38	\$ 24,235,838	\$ 24,800,993	\$ 29,265,420	\$ 35,769,831	\$ 33,045,457	\$ 28,845,640	\$ 347,444,966
Adjusted SC Cost per kWh (¢/kWh)	Line 39 / Line 33 * 100	1.4425	1.5528	1.6780	1.7817	1.5436	1.4197	
Projected SC Retail Sales kWh (October 2021 - September 2022)								
Residential								6,869,069,305
General Service/Lighting								5,852,891,838
Industrial								9,070,560,880
Total SC	Sum Lines 41 through 43							21,792,522,023
SC Base Fuel Rate (¢/kWh)	Line 39 / Line 44 * 100							1.5943

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY - RESIDENTIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.								
		Residential						
1	2019 Firm Coincident Peak CP %	40.90%						
2	2020 Firm Coincident Peak CP %	43.87%						
Line No.	Description	Reference	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020
3	Total Reagents		\$ 1,984,372	\$ 2,501,568	\$ 3,242,928	\$ 1,091,164	\$ 840,766	\$ 1,499,009
4	Emission Allowances		(20,047)	(2,343)	(10,776)	(1,528)	(2,572)	(4,564)
5	Off-System Sales		(23,444)	(4,976)	(52,224)	(5,987)	(5,155)	(15,102)
6	Net Environmental Costs	Sum Lines 3 - 5	\$ 1,940,881	\$ 2,494,249	\$ 3,179,927	\$ 1,083,649	\$ 833,039	\$ 1,479,343
7	Total System kWh Sales	Exhibit 2, page 1	6,734,780,109	8,102,605,011	8,443,024,842	7,621,343,554	6,216,478,500	7,066,717,933
8	Environmental System Costs Incurred (¢ per kWh)	Line 6 / Line 7* 100	0.0288	0.0308	0.0377	0.0142	0.0134	0.0209
9	SC Retail Sales kWh	Exhibit 2, page 1	1,623,613,976	1,916,998,453	2,010,846,771	1,877,139,122	1,509,190,428	1,758,086,136
10	SC Environmental Costs	Line 8 * Line 9 / 100	\$ 467,905	\$ 590,115	\$ 757,353	\$ 266,903	\$ 202,239	\$ 368,037
11	Residential Environmental Cost Allocated by Firm CP	Line 10 * Line 1	\$ 191,381	\$ 241,367	\$ 309,770	\$ 109,168	\$ 82,719	\$ 150,533
12	SC Residential kWh Sales		531,862,162	707,354,351	738,300,056	626,104,018	404,250,903	422,236,888
13	SC Residential Environmental Cost Incurred (¢ per kWh)	Line 11 / Line 12 * 100	0.0360	0.0341	0.0420	0.0174	0.0205	0.0357
14	SC Residential Environmental Cost Billed (¢ per kWh)	Company records	0.0603	0.0603	0.0603	0.0603	0.0410	0.0207
15	SC Residential Environmental Costs (Over) / Under Recovery	(-Line 14 + Line 13)*Line 12 /100	\$ (129,332)	\$ (185,168)	\$ (135,425)	\$ (268,373)	\$ (83,116)	\$ 63,130
16	(Over) / Under Cumulative Balance May 2020	Prior Year Annual Filing	\$ (464,285)					
17	Accounting Adjustment(s)							
18	Cumulative SC Residential Environmental Costs (Over) / Under Recovery	Line 15 + Line 17 + PM Cum Bal	\$ (593,617)	\$ (778,785)	\$ (914,210)	\$ (1,182,583)	\$ (1,265,699)	\$ (1,202,569)

Line No.	Description	Reference	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	Twelve Months Ended May 2021
19	Total Reagents		\$ 1,605,381	\$ 1,307,683	\$ 2,083,058	\$ 1,076,562	\$ 1,638,555	\$ 1,695,675	20,566,720
20	Emission Allowances		(4,878)	(5,351)	(8,449)	(28,510)	(19,148)	(36,372)	(144,538)
21	Off-System Sales		(9,847)	(17,043)	(22,671)	(80,258)	(53,105)	(101,100)	(390,912)
22	Net Environmental Costs	Sum Lines 19 - 21	\$ 1,590,655	\$ 1,285,290	\$ 2,051,939	\$ 967,794	\$ 1,566,302	\$ 1,558,203	\$ 20,031,270
23	Total System kWh Sales	Exhibit 2, page 1	6,272,969,895	8,612,692,842	7,023,124,257	6,159,528,696	6,262,731,991	5,739,755,562	84,255,753,192
24	Environmental System Costs Incurred (¢ per kWh)	Line 22 / Line 23* 100	0.0254	0.0149	0.0292	0.0157	0.0250	0.0271	
25	SC Retail Sales kWh	Exhibit 2, page 1	1,386,684,247	2,046,721,244	1,610,951,313	1,377,957,373	1,468,606,143	1,396,012,579	19,982,807,784
26	SC Environmental Costs	Line 24 * Line 25 / 100	\$ 351,625	\$ 305,436	\$ 470,670	\$ 216,507	\$ 367,296	\$ 378,982	\$ 4,743,067
27	Residential Environmental Cost Allocated by Firm CP	Line 26 * Line 1 (or Line 2)	\$ 143,821	\$ 134,003	\$ 206,495	\$ 94,987	\$ 161,142	\$ 166,269	\$ 1,991,653
28	SC Residential kWh Sales		574,708,890	727,413,286	575,946,759	566,001,840	463,487,443	390,767,385	6,728,433,981
29	SC Residential Environmental Cost Incurred (¢ per kWh)	Line 27 / Line 28 * 100	0.0250	0.0184	0.0359	0.0168	0.0348	0.0425	
30	SC Residential Environmental Cost Billed (¢ per kWh)	Company records	0.0207	0.0207	0.0207	0.0207	0.0207	0.0207	
31	SC Residential Environmental Costs (Over) / Under Recovery	(-Line 30 + Line 29)*Line 28 /100	\$ 24,856	\$ (16,572)	\$ 87,274	\$ (22,175)	\$ 65,200	\$ 85,380	\$ (514,322)
32	Accounting Adjustment(s)								-
33	Cumulative SC Residential Environmental Costs (Over) / Under Recovery	Sum Lines 31-32 + PM Cum Bal	\$ (1,177,713)	\$ (1,194,285)	\$ (1,107,011)	\$ (1,129,187)	\$ (1,063,987)	\$ (978,607)	\$ (978,607)

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY - RESIDENTIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.		Residential						
1	2019 Firm Coincident Peak CP %	40.90%						
2	2020 Firm Coincident Peak CP %	43.87%						
Line No.	Description	Reference	Estimated June 2021	Estimated July 2021	Estimated August 2021	Estimated September 2021	Sixteen Months Ended September 2021	
34	Total Reagents		\$ 2,481,684	\$ 1,862,888	\$ 1,865,231	\$ 1,132,452	\$ 27,908,975	
35	Emission Allowances		463	332	337	194	\$ (143,211)	
36	Off-System Sales		(15,659)	(17,570)	(21,919)	(7,528)	\$ (453,587)	
37	Net Environmental Costs	Sum Lines 34 - 36	\$ 2,466,489	\$ 1,845,649	\$ 1,843,650	\$ 1,125,118	\$ 27,312,177	
38	Total Projected System Sales kWhs (w/solar)	Exhibit 2, page 2	7,025,575,203	8,271,350,711	8,670,278,197	8,040,495,325	116,263,452,627	
39	Environmental System Costs Incurred (¢ per kWh)	Line 37 / Line 38 * 100	0.0351	0.0223	0.0213	0.0140		
40	Projected SC Retail Sales kWh (w/solar)	Exhibit 2, page 2	1,721,298,717	1,995,059,533	2,115,058,217	1,995,845,841	27,810,070,092	
41	SC Environmental Costs	Line 39 / 100 * Line 40	\$ 604,301	\$ 445,173	\$ 449,746	\$ 279,282	\$ 6,521,569	
42	Residential Environmental Cost Allocated by Firm CP	Line 44 * Line 2	\$ 265,122	\$ 195,308	\$ 197,315	\$ 122,528	\$ 2,771,926	
43	SC Projected Residential kWh Sales (w/solar)		490,472,137	656,906,123	701,106,219	628,335,508	9,205,253,967	
44	SC Residential Environmental Cost Incurred (¢ per kWh)	Line 42 / Line 43 * 100	0.0541	0.0297	0.0281	0.0195		
45	SC Residential Environmental Cost Billed (¢ per kWh)	Company records	0.0207	0.0207	0.0207	0.0207		
46	SC Residential Environmental Costs (Over) / Under Recovery	(-Line 45 + Line 44) * Line 43 /100	\$ 163,594	\$ 59,329	\$ 52,186	\$ (7,538)	\$ (246,750)	
47	Accounting Adjustment(s)						\$ -	
48	Cumulative SC Residential Environmental Costs (Over) / Under Recovery	Sum Lines 46-47 + PM Cum Bal	\$ (815,012)	\$ (755,683)	\$ (703,497)	\$ (711,035)	\$ (711,035)	
49	SC Projected Residential Sales (October 2021-September 2022)	Exhibit 3					6,869,069,305	
50	SC Residential Environmental Increment / (Decrement) (¢ per kWh)	Line 48 / Line 49 * 100					(0.0104)	

Line No.	General Service / Lighting								
1	2019 Firm Coincident Peak CP %	28.31%							
2	2020 Firm Coincident Peak CP %	26.91%							
Line No.	Description	Reference	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020	
3	Total Reagents		\$ 1,984,372	\$ 2,501,568	\$ 3,242,928	\$ 1,091,164	\$ 840,766	\$ 1,499,009	
4	Emission Allowances		(20,047)	(2,343)	(10,776)	(1,528)	(2,572)	(4,564)	
5	Off-System Sales		(23,444)	(4,976)	(52,224)	(5,987)	(5,155)	(15,102)	
6	Net Environmental Costs	Sum Lines 3 - 5	\$ 1,940,881	\$ 2,494,249	\$ 3,179,927	\$ 1,083,649	\$ 833,039	\$ 1,479,343	
7	Total System kWh Sales	Exhibit 2, page 1	6,734,780,109	8,102,605,011	8,443,024,842	7,621,343,554	6,216,478,500	7,066,717,933	
8	Environmental System Costs Incurred (¢ per kWh)	Line 6 / Line 7 * 100	0.0288	0.0308	0.0377	0.0142	0.0134	0.0209	
9	SC Retail Sales kWh	Exhibit 2, page 1	1,623,613,976	1,916,998,453	2,010,846,771	1,877,139,122	1,509,190,428	1,758,086,136	
10	SC Environmental Costs	Line 8 * Line 9 / 100	\$ 467,905	\$ 590,115	\$ 757,353	\$ 266,903	\$ 202,239	\$ 368,037	
11	General Service / Lighting Environmental Cost Allocated by Firm CP	Line 10 * Line 1	\$ 132,451	\$ 167,045	\$ 214,386	\$ 75,553	\$ 57,248	\$ 104,181	
12	SC General Service / Lighting kWh Sales		439,496,485	513,435,107	524,755,584	504,075,404	414,951,913	421,576,148	
13	SC General Service / Lighting Environmental Cost Incurred (¢ per kWh)	Line 11 / Line 12 * 100	0.0301	0.0325	0.0409	0.0150	0.0138	0.0247	
14	SC General Service / Lighting Environmental Cost Billed (¢ per kWh)	Company records	0.0249	0.0249	0.0249	0.0249	0.0263	0.0278	
15	SC General Service / Lighting Environmental Costs (Over) / Under Recovery	(-Line 14 + Line 13)*Line 12 /100	\$ 23,016	\$ 39,200	\$ 83,722	\$ (49,962)	\$ (51,933)	\$ (13,017)	
16	(Over) / Under Cumulative Balance May 2020	Prior Year Annual Filing	\$ (233,084)						
17	Accounting Adjustment(s)								
18	Cumulative SC General Service / Lighting Environmental Costs (Over) / Under Recovery	Line 15 + Line 17 + PM Cum Bal	\$ (210,068)	\$ (170,868)	\$ (87,145)	\$ (137,107)	\$ (189,040)	\$ (202,057)	
Line No.	Description	Reference	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	Twelve Months Ended May 2021
19	Total Reagents		\$ 1,605,381	\$ 1,307,683	\$ 2,083,058	\$ 1,076,562	\$ 1,638,555	\$ 1,695,675	\$ 20,566,720
20	Emission Allowances		(4,878)	(5,351)	(8,449)	(28,510)	(19,148)	(36,372)	(144,538)
21	Off-System Sales		(9,847)	(17,043)	(22,671)	(80,258)	(53,105)	(101,100)	(390,912)
22	Net Environmental Costs	Sum Lines 19 - 21	\$ 1,590,655	\$ 1,285,290	\$ 2,051,939	\$ 967,794	\$ 1,566,302	\$ 1,558,203	\$ 20,031,270
23	Total System kWh Sales	Exhibit 2, page 1	6,272,969,895	8,612,692,842	7,023,124,257	6,159,528,696	6,262,731,991	5,739,755,562	84,255,753,192
24	Environmental System Costs Incurred (¢ per kWh)	Line 22 / Line 23* 100	0.0254	0.0149	0.0292	0.0157	0.0250	0.0271	
25	SC Retail Sales kWh	Exhibit 2, page 1	1,386,684,247	2,046,721,244	1,610,951,313	1,377,957,373	1,468,606,143	1,396,012,579	19,982,807,784
26	SC Environmental Costs	Line 24 * Line 25/ 100	\$ 351,626	\$ 305,436	\$ 470,670	\$ 216,507	\$ 367,296	\$ 378,982	\$ 4,743,068
27	General Service / Lighting Environmental Cost Allocated by Firm CP	Line 26 * Line 1 (or Line 2)	\$ 99,535	\$ 82,194	\$ 126,658	\$ 58,263	\$ 98,840	\$ 101,985	\$ 1,318,340
28	SC General Service / Lighting kWh Sales		385,907,343	456,875,444	381,610,808	392,520,450	386,168,289	381,909,477	5,203,282,451
29	SC General Service / Lighting Environmental Cost Incurred (¢ per kWh)	Line 27 / Line 28 * 100	0.0258	0.0180	0.0332	0.0148	0.0256	0.0267	
30	SC General Service / Lighting Environmental Cost Billed (¢ per kWh)	Company Records	0.0278	0.0278	0.0278	0.0278	0.0278	0.0278	
31	SC General Service / Lighting Environmental Costs (Over) / Under Recovery	(-Line 30 + Line 29)*Line 28 /100	\$ (7,747)	\$ (44,817)	\$ 20,570	\$ (50,858)	\$ (8,515)	\$ (4,186)	\$ (64,525)
32	Accounting Adjustment(s)								\$ -
33	Cumulative SC General Service / Lighting Environmental Costs (Over) / Under Recovery	Sum Lines 31-32 + PM Cum Bal	\$ (209,804)	\$ (254,620)	\$ (234,051)	\$ (284,909)	\$ (293,423)	\$ (297,609)	\$ (297,609)

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY-GENERAL SERVICE/ LIGHTING
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.								
			General Service / Lighting					
1		2019 Firm Coincident Peak CP %	28.31%					
2		2020 Firm Coincident Peak CP %	26.91%					
Line No.	Description	Reference	Estimated June 2021	Estimated July 2021	Estimated August 2021	Estimated September 2021	Sixteen Months Ended September 2021	
34	Total Reagents		\$ 2,481,684	\$ 1,862,888	\$ 1,865,231	\$ 1,132,452	\$ 27,908,975	
35	Emission Allowances		463	332	337	194	\$ (143,211)	
36	Off-System Sales		(15,659)	(17,570)	(21,919)	(7,528)	\$ (453,587)	
37	Net Environmental Costs	Sum Lines 34 - 36	\$ 2,466,489	\$ 1,845,649	\$ 1,843,650	\$ 1,125,118	\$ 27,312,177	
38	Total Projected System Sales kWhs (w/solar)	Exhibit 2, page 2	7,025,575,203	8,271,350,711	8,670,278,197	8,040,495,325	116,263,452,627	
39	Environmental System Costs Incurred (¢ per kWh)	Line 37 / Line 38* 100	0.0351	0.0223	0.0213	0.0140		
40	Projected SC Retail Sales kWh (w/solar)	Exhibit 2, page 2	1,721,298,717	1,995,059,533	2,115,058,217	1,995,845,841	27,810,070,092	
41	SC Environmental Costs	Line 39 * Line 49/ 100	\$ 604,301	\$ 445,173	\$ 449,746	\$ 279,282	\$ 6,521,570	
42	General Service / Lighting Environmental Cost Allocated by Firm CP	Line 41 * Line 2	\$ 162,619	\$ 119,797	\$ 121,028	\$ 75,155	\$ 1,796,939	
43	SC Projected General Service / Lighting kWh Sales (w/solar)		489,390,177	554,692,679	574,608,275	547,219,382	7,369,192,964	
44	SC General Service / Lighting Environmental Cost Incurred (¢ per kWh)	Line 42 / Line 43 * 100	0.0332	0.0216	0.0211	0.0137		
45	SC General Service / Lighting Environmental Cost Billed (¢ per kWh)	Company Records	0.0278	0.0278	0.0278	0.0278		
46	SC General Service / Lighting Environmental Costs (Over) / Under Recovery	(-Line 45 + Line 44) * Line 43 /100	\$ 26,569	\$ (34,407)	\$ (38,713)	\$ (76,972)	\$ (188,049)	
47	Accounting Adjustment(s)						\$ -	
48	Cumulative SC General Service / Lighting Environmental Costs (Over) / Under Recovery	Sum Lines 46-47 + PM Cum Bal	\$ (271,041)	\$ (305,448)	\$ (344,161)	\$ (421,133)	\$ (421,133)	
49	SC Projected General Service / Lighting Sales (October 2021 - September 2022)	Exhibit 3					5,852,891,838	
50	SC General Service / Lighting Environmental Increment / (Decrement) (¢ per kWh)	Line 48 / Line 49 * 100					(0.0072)	

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY-INDUSTRIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.									
		Industrial							
1	2019 Firm Coincident Peak CP %	30.79%							
2	2020 Firm Coincident Peak CP %	29.22%							
Line No.	Description	Reference	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020	
3	Total Reagents		\$ 1,984,372	\$ 2,501,568	\$ 3,242,928	\$ 1,091,164	\$ 840,766	\$ 1,499,009	
4	Emission Allowances		(20,047)	(2,343)	(10,776)	(1,528)	(2,572)	(4,564)	
5	Off-System Sales		(23,444)	(4,976)	(52,224)	(5,987)	(5,155)	(15,102)	
6	Net Environmental Costs	Sum Lines 3 - 5	\$ 1,940,881	\$ 2,494,249	\$ 3,179,927	\$ 1,083,649	\$ 833,039	\$ 1,479,343	
7	Total System kWh Sales	Exhibit 2, page 1	6,734,780,109	8,102,605,011	8,443,024,842	7,621,343,554	6,216,478,500	7,066,717,933	
8	Environmental System Costs Incurred (¢ per kWh)	Line 6 / Line 7 * 100	0.0288	0.0308	0.0377	0.0142	0.0134	0.0209	
9	SC Retail Sales kWh	Exhibit 2, page 1	1,623,613,976	1,916,998,453	2,010,846,771	1,877,139,122	1,509,190,428	1,758,086,136	
10	SC Environmental Costs	Line 8 * Line 9 / 100	\$ 467,905	\$ 590,115	\$ 757,353	\$ 266,903	\$ 202,239	\$ 368,037	
11	Industrial Environmental Cost Allocated by Firm CP	Line 10 * Line 1	\$ 144,073	\$ 181,703	\$ 233,197	\$ 82,182	\$ 62,272	\$ 113,323	
12	SC Industrial kWh Sales		652,255,329	696,208,995	747,791,131	746,959,700	689,987,612	914,273,100	
13	SC Industrial Environmental Cost Incurred (¢ per kWh)	Line 11 / Line 12 * 100	0.0221	0.0261	0.0312	0.0110	0.0090	0.0124	
14	SC Industrial Environmental Cost Billed (¢ per kWh)	Company records	0.0158	0.0158	0.0158	0.0158	0.0180	0.0204	
15	SC Industrial Environmental Costs (Over) / Under Recovery	(-Line 14 + Line 13)*Line 12 /100	\$ 41,017	\$ 71,702	\$ 115,046	\$ (35,838)	\$ (62,197)	\$ (73,189)	
16	(Over) / Under Cumulative Balance May 2020	Prior Year Annual Filing	\$ (347,392)						
17	Accounting Adjustment(s)								
18	Cumulative SC Industrial Environmental Costs (Over) / Under Recovery	Line 15 + Line 17 + PM Cum Bal	\$ (306,375)	\$ (234,673)	\$ (119,627)	\$ (155,465)	\$ (217,662)	\$ (290,851)	

Line No.	Description	Reference	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	Twelve Months Ended May 2021
19	Total Reagents		\$ 1,605,381	\$ 1,307,683	\$ 2,083,058	\$ 1,076,562	\$ 1,638,555	\$ 1,695,675	\$ 20,566,720
20	Emission Allowances		(4,878)	(5,351)	(8,449)	(28,510)	(19,148)	(36,372)	(144,538)
21	Off-System Sales		(9,847)	(17,043)	(22,671)	(80,258)	(53,105)	(101,100)	(390,912)
22	Net Environmental Costs	Sum Lines 19 - 21	\$ 1,590,655	\$ 1,285,290	\$ 2,051,939	\$ 967,794	\$ 1,566,302	\$ 1,558,203	\$ 20,031,270
23	Total System kWh Sales	Exhibit 2, page 1	6,272,969,895	8,612,692,842	7,023,124,257	6,159,528,696	6,262,731,991	5,739,755,562	84,255,753,192
24	Environmental System Costs Incurred (¢ per kWh)	Line 22 / Line 23* 100	0.0254	0.0149	0.0292	0.0157	0.0250	0.0271	
25	SC Retail Sales kWh	Exhibit 2, page 1	1,386,684,247	2,046,721,244	1,610,951,313	1,377,957,373	1,468,606,143	1,396,012,579	19,982,807,784
26	SC Environmental Costs	Line 24 * Line 25 / 100	\$ 351,626	\$ 305,436	\$ 470,670	\$ 216,507	\$ 367,296	\$ 378,982	\$ 4,743,068
27	Industrial Environmental Cost Allocated by Firm CP	Line 26 * Line 1 (or Line 2)	\$ 108,269	\$ 89,240	\$ 137,517	\$ 63,257	\$ 107,314	\$ 110,728	\$ 1,433,076
28	SC Industrial kWh Sales		426,068,014	862,432,514	653,393,746	419,435,083	618,950,411	623,335,717	8,051,091,352
29	SC Industrial Environmental Cost Incurred (¢ per kWh)	Line 27 / Line 28 * 100	0.0254	0.0103	0.0210	0.0151	0.0173	0.0178	
30	SC Industrial Environmental Cost Billed (¢ per kWh)	Company Records	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	
31	SC Industrial Environmental Costs (Over) / Under Recovery	(-Line 30 + Line 29)*Line 28 /100	\$ 21,351	\$ (86,696)	\$ 4,225	\$ (22,308)	\$ (18,952)	\$ (16,432)	\$ (62,272)
32	Accounting Adjustment(s)								\$ -
33	Cumulative SC Industrial Environmental Costs (Over) / Under Recovery	Sum Lines 31-32 + PM Cum Bal	\$ (269,501)	\$ (356,197)	\$ (351,971)	\$ (374,280)	\$ (393,232)	\$ (409,664)	\$ (409,664)

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY-INDUSTRIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.		Industrial						
1	2019 Firm Coincident Peak CP %	30.79%						
2	2020 Firm Coincident Peak CP %	29.22%						
Line No.	Description	Reference	Estimated June 2021	Estimated July 2021	Estimated August 2021	Estimated September 2021	Sixteen Months Ended September 2021	
34	Total Reagents		\$ 2,481,684	\$ 1,862,888	\$ 1,865,231	\$ 1,132,452	\$ 27,908,975	
35	Emission Allowances		463	332	337	194	\$ (143,211)	
36	Off-System Sales		(15,659)	(17,570)	(21,919)	(7,528)	\$ (453,587)	
37	Net Environmental Costs	Sum Lines 34 - 36	\$ 2,466,489	\$ 1,845,649	\$ 1,843,650	\$ 1,125,118	\$ 27,312,177	
38	Total Projected System Sales kWhs (w/solar)	Exhibit 2, page 2	7,025,575,203	8,271,350,711	8,670,278,197	8,040,495,325	116,263,452,627	
39	Environmental System Costs Incurred (¢ per kWh)	Line 37 / Line 38* 100	0.0351	0.0223	0.0213	0.0140		
40	Projected SC Retail Sales kWh (w/solar)	Exhibit 2, page 2	1,721,298,717	1,995,059,533	2,115,058,217	1,995,845,841	27,810,070,092	
41	SC Environmental Costs	Line 39 * Line 40/ 100	\$ 604,301	\$ 445,173	\$ 449,746	\$ 279,282	\$ 6,521,570	
42	Industrial Environmental Cost Allocated by Firm CP	Line 41 * Line 2	\$ 176,560	\$ 130,067	\$ 131,404	\$ 81,598	\$ 1,952,705	
43	SC Projected Industrial kWh Sales (w/solar)		741,436,403	783,460,731	839,343,723	820,290,951	11,235,623,160	
44	SC Industrial Environmental Cost Incurred (¢ per kWh)	Line 42 / Line 43 * 100	0.0238	0.0166	0.0157	0.0099		
45	SC Industrial Environmental Cost Billed (¢ per kWh)	Company records	0.0204	0.0204	0.0204	0.0204		
46	SC Industrial Environmental Costs (Over) / Under Recovery	(-Line 45 + Line 44) * Line 43 /100	\$ 25,307	\$ (29,759)	\$ (39,823)	\$ (85,741)	\$ (192,287)	
47	Accounting Adjustment(s)						\$ -	
48	Cumulative SC Industrial Environmental Costs (Over) / Under Recovery	Sum Lines 46-47 + PM Cum Bal	\$ (384,357)	\$ (414,116)	\$ (453,939)	\$ (539,679)	\$ (539,679)	
49	SC Projected Industrial Sales (October 2021 - September 2022)	Exhibit 3						9,070,560,880
50	SC Industrial Environmental Increment / (Decrement) (¢ per kWh)	Line 48 / Line 49 * 100						(0.0059)

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
PROJECTED BILLING PERIOD ENVIRONMENTAL COSTS
FOR THE 12 MONTHS OCTOBER 2021 TO SEPTEMBER 2022

Line No.	Class	2020 Firm Coincident Peak (CP) KWs	CP %
1	Residential	1,710,195	43.87%
2	General Service / Lighting	1,048,989	26.91%
3	Industrial	1,138,918	29.22%
	Total SC	3,898,103	100.00%

Line No.	Description	Reference	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022
4	Total Reagents		\$ 822,185	\$ 1,418,840	\$ 1,915,572	\$ 2,900,987	\$ 2,744,864	\$ 967,230
5	Emission Allowances		123	272	383	592	584	230
6	Estimated Off-system Sales		(10,222)	(300)	(25,959)	(88,435)	(58,360)	(14,663)
7	Net Environmental Costs	Sum Lines 4 - 6	\$ 812,085	\$ 1,418,812	\$ 1,889,996	\$ 2,813,144	\$ 2,687,088	\$ 952,797
8	Total Projected System Sales kWhs (w/solar)	Exhibit 3	6,742,888,463	6,307,192,256	7,057,992,507	7,912,246,762	7,911,930,175	7,308,710,605
9	Environmental System Costs Incurred (¢ per kWh)	Line 7 / Line 8 *100	0.0120	0.0225	0.0268	0.0356	0.0340	0.0130
10	Projected SC Retail Sales kWh (w/solar)	Exhibit 3 (Line 13-Line 10)	1,671,642,168	1,556,592,468	1,692,017,820	1,889,749,163	1,922,532,518	1,802,251,595
11	SC Environmental Costs	Line 9 * Line 10 /100	\$ 201,326	\$ 350,158	\$ 453,090	\$ 671,887	\$ 652,940	\$ 234,950

Line No.	Description	Reference	April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	Billing Period Twelve Months Ended September 2022
12	Total Reagents		\$ 303,159	\$ 350,740	\$ 606,957	\$ 1,067,279	\$ 921,397	\$ 565,850	\$ 14,585,058
13	Emission Allowances		69	83	143	250	217	140	3,087
14	Estimated Off-system Sales		(12,236)	(39,437)	(31,815)	(23,483)	(25,339)	(20,749)	(350,996)
15	Net Environmental Costs	Sum Lines 12 - 14	\$ 290,992	\$ 311,386	\$ 575,285	\$ 1,044,045	\$ 896,275	\$ 545,241	\$ 14,237,148
16	Total Projected System Sales kWhs (w/solar)	Exhibit 3	6,605,549,360	6,323,257,933	7,091,353,562	8,292,665,926	8,744,695,201	8,162,715,217	88,461,197,969
17	Environmental System Costs Incurred (¢ per kWh)	Line 15 / Line 16 *100	0.0044	0.0049	0.0081	0.0126	0.0102	0.0067	
18	Projected SC Retail Sales kWh (w/solar)	Exhibit 3 (Line 33 - Line 30)	1,670,721,121	1,587,865,456	1,734,682,355	1,998,272,611	2,131,507,681	2,022,434,802	21,680,269,758
19	SC Environmental Costs	Line 17 * Line 18 /100	\$ 73,600	\$ 78,194	\$ 140,726	\$ 251,582	\$ 218,466	\$ 135,092	\$ 3,462,009
SC Environmental Costs Allocated on Firm CP kW's									
20	Residential	Total Line 19 * Line 1							\$ 1,518,870
21	General Service / Lighting	Total Line 19 * Line 2							\$ 931,636
22	Industrial	Total Line 19 * Line 3							\$ 1,011,504
23	Total SC	Sum Lines 20 through 22							\$ 3,462,009
Projected SC Retail Sales kWh (October 2021 - September 2022)									
24	Residential	Exhibit 3							6,869,069,305
25	General Service / Lighting	Exhibit 3							5,852,891,838
26	Industrial	Exhibit 3							9,070,560,880
27	Total SC	Sum Lines 24 through 26							21,792,522,023
SC Enviromental Costs ¢/kWh									
28	Residential	Line 20 / Line 24 * 100							0.0221
29	General Service / Lighting	Line 21 / Line 25 * 100							0.0159
30	Industrial	Line 22 / Line 26 * 100							0.0112

DUKE ENERGY CAROLINAS, LLC
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CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - RESIDENTIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.		Residential							
1	2019 Firm Coincident Peak CP %	40.90%							
2	2020 Firm Coincident Peak CP %	43.87%							

Line No.	Description	Reference	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020	
3	Total PURPA Purchased Power Capacity Costs		\$ 2,229,546	\$ 6,657,133	\$ 7,357,171	\$ 3,985,938	\$ 3,175,457	\$ 1,149,903	
4	Firm Natural Gas Transportation and Storage Costs		3,929,746	2,667,141	4,190,885	4,355,346	4,556,073	3,751,814	
5	Total Capacity Related Costs	Sum Lines 3 - 4	\$ 6,159,292	\$ 9,324,274	\$ 11,548,056	\$ 8,341,285	\$ 7,731,530	\$ 4,901,717	
6	Total System kWh Sales	Exhibit 2, page 1	6,734,780,109	8,102,605,011	8,443,024,842	7,621,343,554	6,216,478,500	7,066,717,933	
7	Capacity Related System Costs Incurred (¢/kWh)	Line 5 / Line 6* 100	0.0915	0.1151	0.1368	0.1094	0.1244	0.0694	
8	SC Retail Sales kWh	Exhibit 2, page 1	1,623,613,976	1,916,998,453	2,010,846,771	1,877,139,122	1,509,190,428	1,758,086,136	
9	SC Capacity Related Cost Incurred	Line 7 / 100* Line 8	\$ 1,484,876	\$ 2,206,033	\$ 2,750,361	\$ 2,054,461	\$ 1,877,003	\$ 1,219,469	
10	Residential Capacity Related Cost Allocated by Firm CP	Line 9 * Line 1	\$ 607,339	\$ 902,304	\$ 1,124,943	\$ 840,308	\$ 767,725	\$ 498,783	
11	SC Residential kWh Sales	Exhibit 4, page 1	531,862,162	707,354,351	738,300,056	626,104,018	404,250,903	422,236,888	
12	SC Residential Capacity Related Cost Incurred (¢/kWh)	Line 10 / Line 11 * 100	0.1142	0.1276	0.1524	0.1342	0.1899	0.1181	
13	SC Residential Billed (¢/kWh)	Company Records	0.1101	0.1101	0.1101	0.1101	0.0972	0.0836	
14	SC Capacity Related (Over) / Under Recovery	(-Line 13 + Line 12)* Line 11 / 100	\$ 21,759	\$ 123,507	\$ 312,075	\$ 150,967	\$ 374,794	\$ 145,793	
15	(Over) / Under Cumulative Balance May 2020	Prior Year Annual Filing	\$ (643,188)						
16	Accounting Adjustment(s)								
17	Cumulative SC Residential Capacity Related (Over) / Under Recovery	Line 14+ Line 16 + PM Cum Bal	\$ (621,429)	\$ (497,921)	\$ (185,847)	\$ (34,880)	\$ 339,914	\$ 485,707	

Line No.	Description	Reference	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	Twelve Months Ended May 2021
18	Total PURPA Purchased Power Capacity Costs		\$ 1,081,847	\$ 1,511,405	\$ 1,465,130	\$ 1,363,634	\$ 933,570	\$ 1,454,625	\$ 32,365,359
19	Firm Natural Gas Transportation and Storage Costs		3,109,163	4,369,451	3,661,844	4,091,905	3,916,116	4,489,851	47,089,335
20	Total Capacity Related Costs	Sum Lines 18-19	\$ 4,191,010	\$ 5,880,856	\$ 5,126,974	\$ 5,455,539	\$ 4,849,686	\$ 5,944,476	\$ 79,454,694
21	Total System kWh Sales	Exhibit 2, page 1	6,272,969,895	8,612,692,842	7,023,124,257	6,159,528,696	6,262,731,991	5,739,755,562	84,255,753,192
22	Capacity Related System Costs Incurred (¢/kWh)	Line 20 / Line 21* 100	0.0668	0.0683	0.0730	0.0886	0.0774	0.1036	
23	SC Retail Sales kWh	Exhibit 2, page 1	1,386,684,247	2,046,721,244	1,610,951,313	1,377,957,373	1,468,606,143	1,396,012,579	19,982,807,784
24	SC Capacity Related Cost Incurred	Line 22 / 100 * Line 23	\$ 926,452	\$ 1,397,527	\$ 1,176,016	\$ 1,220,467	\$ 1,137,240	\$ 1,445,793	\$ 18,895,698
25	Residential PURPA Capacity Related Cost Allocated by Firm CP	Line 24 * Line 1 (or Line 2)	\$ 378,934	\$ 613,130	\$ 515,948	\$ 535,449	\$ 498,939	\$ 634,310	\$ 7,918,111
26	SC Residential kWh Sales	Exhibit 4, page 1	574,708,890	727,413,286	575,946,759	566,001,840	463,487,443	390,767,385	6,728,433,981
27	SC Residential Capacity Related Cost Incurred (¢/kWh)	Line 25 / Line 26 * 100	0.0659	0.0843	0.0896	0.0946	0.1076	0.1623	
28	SC Residential Billed (¢/kWh)	Company Records	0.0836	0.0836	0.0836	0.0836	0.0836	0.0836	
29	SC Capacity Related (Over) / Under Recovery	(-Line 28 + Line 27)*Line 26 / 100	\$ (101,523)	\$ 5,012	\$ 34,457	\$ 62,271	\$ 111,463	\$ 307,628	\$ 1,548,202
30	Accounting Adjustment(s)								\$ -
31	Cumulative SC Residential Capacity Related (Over) / Under Recovery	Sum Lines 29-30 + PM Cum Bal	\$ 384,183	\$ 389,195	\$ 423,652	\$ 485,923	\$ 597,386	\$ 905,014	\$ 905,014

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CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - RESIDENTIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.		Residential						
1	2019 Firm Coincident Peak CP %	40.90%						
2	2020 Firm Coincident Peak CP %	43.87%						
Line No.	Description	Reference	Estimated June 2021	Estimated July 2021	Estimated August 2021	Estimated September 2021	Sixteen Months Ended September 2021	
32	Total PURPA Purchased Power Capacity Costs		\$ 1,975,915	\$ 1,981,523	\$ 2,004,806	\$ 1,848,531	\$ 40,176,134	
33	Firm Natural Gas Transportation and Storage Costs		2,898,127	3,851,695	3,878,797	4,082,051	\$ 61,800,005	
34	Total Capacity Related Costs	Sum Lines 32 - 33	\$ 4,874,042	\$ 5,833,218	\$ 5,883,602	\$ 5,930,582	\$ 101,976,139	
35	Total System kWh Sales	Exhibit 2, page 2	7,025,575,203	8,271,350,711	8,670,278,197	8,040,495,325	116,263,452,627	
36	Capacity Related System Costs Incurred (¢/kWh)	Line 34 / Line 35* 100	0.0694	0.0705	0.0679	0.0738		
37	SC Retail Sales kWh	Exhibit 2, page 2	1,721,298,717	1,995,059,533	2,115,058,217	1,995,845,841	27,810,070,092	
38	SC Capacity Related Cost Incurred	Line 36 / 100* Line 37	\$ 1,194,163	\$ 1,406,979	\$ 1,435,267	\$ 1,472,114	\$ 24,404,221	
39	Residential Capacity Related Cost Allocated by Firm CP	Line 38 * Line 2	\$ 523,909	\$ 617,277	\$ 629,687	\$ 645,853	\$ 10,334,838	
40	SC Projected Residential kWh Sales	Exhibit 4, page 2	490,472,137	656,906,123	701,106,219	628,335,508	9,205,253,967	
41	SC Residential Capacity Related Cost Incurred (¢/kWh)	Line 39 / Line 40 * 100	0.1068	0.0940	0.0898	0.1028		
42	SC Residential Billed (¢/kWh)	Company Records	0.0836	0.0836	0.0836	0.0836		
43	SC Capacity Related (Over) / Under Recovery	(-Line 42 + Line 41)*Line 40 /100	\$ 113,874	\$ 68,103	\$ 43,563	\$ 120,565	\$ 1,894,307	
44	Accounting Adjustment(s)						\$ -	
45	Cumulative SC Residential Capacity Related (Over) / Under Recovery	Sum Lines 43 - 44 + PM Cum Bal	\$ 1,018,888	\$ 1,086,992	\$ 1,130,554	\$ 1,251,119	\$ 1,251,119	
46	SC Projected Residential Sales (October 2021-September 2022)	Exhibit 3						6,869,069,305
47	SC Residential Capacity Related Increment / (Decrement) (¢/kWh)	Line 45 / Line 46* 100						0.0182

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - GENERAL SERVICE/ LIGHTING
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.			General Service / Lighting					
1		2019 Firm Coincident Peak CP %	28.31%					
2		2020 Firm Coincident Peak CP %	26.91%					

Line No.	Description	Reference	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020
3	Total PURPA Purchased Power Capacity Costs		\$ 2,229,546	\$ 6,657,133	\$ 7,357,171	\$ 3,985,938	\$ 3,175,457	\$ 1,149,903
4	Firm Natural Gas Transportation and Storage Costs		\$ 3,929,746	\$ 2,667,141	\$ 4,190,885	\$ 4,355,346	\$ 4,556,073	\$ 3,751,814
5	Total Capacity Related Costs	Sum Lines 3 - 4	\$ 6,159,292	\$ 9,324,274	\$ 11,548,056	\$ 8,341,285	\$ 7,731,530	\$ 4,901,717
6	Total System kWh Sales	Exhibit 2, page 1	6,734,780,109	8,102,605,011	8,443,024,842	7,621,343,554	6,216,478,500	7,066,717,933
7	Capacity Related System Costs Incurred (¢/kWh)	Line 5 / Line 6* 100	0.0915	0.1151	0.1368	0.1094	0.1244	0.0694
8	SC Retail Sales kWh	Exhibit 2, page 1	1,623,613,976	1,916,998,453	2,010,846,771	1,877,139,122	1,509,190,428	1,758,086,136
9	SC Capacity Related Cost Incurred	Line 7 / 100* Line 8	\$ 1,484,876	\$ 2,206,033	\$ 2,750,361	\$ 2,054,461	\$ 1,877,003	\$ 1,219,469
10	General Service / Lighting Capacity Related Cost Allocated by Firm CP	Line 9 * Line 1	\$ 420,327	\$ 624,467	\$ 778,551	\$ 581,561	\$ 531,328	\$ 345,198
11	SC General Service / Lighting kWh Sales	Exhibit 4, page 3	439,496,485	513,435,107	524,755,584	504,075,404	414,951,913	421,576,148
12	SC General Service / Lighting Capacity Related Cost Incurred (¢/kWh)	Line 10 / Line 11 * 100	0.0956	0.1216	0.1484	0.1154	0.1280	0.0819
13	SC General Service / Lighting Billed (¢/kWh)	Company Records	0.0279	0.0279	0.0279	0.0279	0.0586	0.0910
14	SC Capacity Related (Over) / Under Recovery	(-Line 13 + Line 12)* Line 11 / 100	\$ 297,707	\$ 481,219	\$ 632,144	\$ 440,924	\$ 288,096	\$ (38,436)
15	(Over) / Under Cumulative Balance May 2020	Prior Year Annual Filing	\$ (394,652)					
16	Accounting Adjustment(s)							
17	Cumulative SC General Service / Lighting Capacity Related (Over) / Under Recovery	Line 14+ Line 16 + PM Cum Bal	\$ (96,945)	\$ 384,273	\$ 1,016,417	\$ 1,457,341	\$ 1,745,437	\$ 1,707,001

Line No.	Description	Reference	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	Twelve Months Ended May 2021
18	Total PURPA Purchased Power Capacity Costs		\$ 1,081,847	\$ 1,511,405	\$ 1,465,130	\$ 1,363,634	\$ 933,570	\$ 1,454,625	\$ 32,365,359
19	Firm Natural Gas Transportation and Storage Costs		\$ 3,109,163	\$ 4,369,451	\$ 3,661,844	\$ 4,091,905	\$ 3,916,116	\$ 4,489,851	\$ 47,089,335
20	Total Capacity Related Costs	Sum Lines 18-19	\$ 4,191,010	\$ 5,880,856	\$ 5,126,974	\$ 5,455,539	\$ 4,849,686	\$ 5,944,476	\$ 79,454,694
21	Total System kWh Sales	Exhibit 2, page 1	6,272,969,895	8,612,692,842	7,023,124,257	6,159,528,696	6,262,731,991	5,739,755,562	84,255,753,192
22	Capacity Related System Costs Incurred (¢/kWh)	Line 20 / Line 21* 100	0.0668	0.0683	0.0730	0.0886	0.0774	0.1036	
23	SC Retail Sales kWh	Exhibit 2, page 1	1,386,684,247	2,046,721,244	1,610,951,313	1,377,957,373	1,468,606,143	1,396,012,579	19,982,807,784
24	SC Capacity Related Cost Incurred	Line 22 / 100 * Line 23	\$ 926,452	\$ 1,397,527	\$ 1,176,016	\$ 1,220,467	\$ 1,137,240	\$ 1,445,793	\$ 18,895,698
25	General Service / Lighting Capacity Related Cost Allocated by Firm CP	Line 24 * Line 1 (or Line 2)	\$ 262,253	\$ 376,078	\$ 316,469	\$ 328,431	\$ 306,033	\$ 389,065	\$ 5,259,761
26	SC General Service / Lighting kWh Sales	Exhibit 4, page 3	385,907,343	456,875,444	381,610,808	392,520,450	386,168,289	381,909,477	5,203,282,451
27	SC General Service / Lighting Capacity Related Cost Incurred (¢/kWh)	Line 25 / Line 26 * 100	0.0680	0.0823	0.0829	0.0837	0.0792	0.1019	
28	SC General Service / Lighting Billed (¢/kWh)	Company Records	0.0910	0.0910	0.0910	0.0910	0.0910	0.0910	
29	SC Capacity Related (Over) / Under Recovery	(-Line 28 + Line 27)*Line 26 / 100	\$ (88,923)	\$ (39,679)	\$ (30,797)	\$ (28,763)	\$ (45,380)	\$ 41,527	\$ 1,909,638
30	Accounting Adjustment(s)								\$ -
31	Cumulative SC General Service / Lighting Capacity Related (Over) / Under Recovery	Sum Lines 29-30 + PM Cum Bal	\$ 1,618,078	\$ 1,578,399	\$ 1,547,602	\$ 1,518,840	\$ 1,473,460	\$ 1,514,986	\$ 1,514,986

DUKE ENERGY CAROLINAS, LLC
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CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - GENERAL SERVICE/ LIGHTING
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.				General Service / Lighting				
1		2019 Firm Coincident Peak CP %	28.31%					
2		2020 Firm Coincident Peak CP %	26.91%					
Line No.	Description	Reference	Estimated June 2021	Estimated July 2021	Estimated August 2021	Estimated September 2021	Sixteen Months Ended September 2021	
32	Total PURPA Purchased Power Capacity Costs		\$ 1,975,915	\$ 1,981,523	\$ 2,004,806	\$ 1,848,531	\$ 40,176,134	
33	Firm Natural Gas Transportation and Storage Costs		\$ 2,898,127	\$ 3,851,695	\$ 3,878,797	\$ 4,082,051	\$ 61,800,005	
34	Total Capacity Related Costs	Sum Lines 32-33	\$ 4,874,042	\$ 5,833,218	\$ 5,883,602	\$ 5,930,582	\$ 101,976,139	
35	Total System kWh Sales	Exhibit 2, page 2	7,025,575,203	8,271,350,711	8,670,278,197	8,040,495,325	116,263,452,627	
36	Capacity Related System Costs Incurred (¢/kWh)	Line 34 / Line 35* 100	0.0694	0.0705	0.0679	0.0738		
37	SC Retail Sales kWh	Exhibit 2, page 2	1,721,298,717	1,995,059,533	2,115,058,217	1,995,845,841	27,810,070,092	
38	SC Capacity Related Cost Incurred	Line 36 / 100* Line 37	\$ 1,194,163	\$ 1,406,979	\$ 1,435,267	\$ 1,472,114	\$ 24,404,221	
39	General Service / Lighting Capacity Related Cost Allocated by Firm CP	Line 38 * Line 2	\$ 321,352	\$ 378,622	\$ 386,234	\$ 396,150	\$ 6,742,119	
40	SC General Service / Lighting kWh Sales	Exhibit 4, page 4	489,390,177	554,692,679	574,608,275	547,219,382	7,369,192,964	
41	SC General Service / Lighting Capacity Related Cost Incurred (¢/kWh)	Line 39 / Line 40 * 100	0.0657	0.0683	0.0672	0.0724		
42	SC General Service / Lighting Billed (¢/kWh)	Company Records	0.0910	0.0910	0.0910	0.0910		
43	SC Capacity Related (Over) / Under Recovery	(-Line 42 + Line 41)*Line 40 /100	\$ (123,993)	\$ (126,149)	\$ (136,660)	\$ (101,820)	\$ 1,421,017	
44	Accounting Adjustment(s)						\$ -	
45	Cumulative SC General Service / Lighting Capacity Related (Over) / Under Recovery	Sum Lines 43 - 44 + PM Cum Bal	\$ 1,390,994	\$ 1,264,845	\$ 1,128,185	\$ 1,026,365	\$ 1,026,365	
46	SC Projected General Service / Lighting Sales (October 2021 - September 2022)	Exhibit 3					5,852,891,838	
47	SC General Service / Lighting Capacity Related Increment / (Decrement) (¢/kWh)	Line 45 / Line 46* 100					0.0175	

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - INDUSTRIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.									
		Industrial							
1	2019 Firm Coincident Peak CP %	30.79%							
2	2020 Firm Coincident Peak CP %	29.22%							
Line No.	Description	Reference	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020	
3	Total PURPA Purchased Power Capacity Costs		\$ 2,229,546	\$ 6,657,133	\$ 7,357,171	\$ 3,985,938	\$ 3,175,457	\$ 1,149,903	
4	Firm Natural Gas Transportation and Storage Costs		3,929,746	2,667,141	\$ 4,190,885	\$ 4,355,346	\$ 4,556,073	\$ 3,751,814	
5	Total Capacity Related Costs	Sum Lines 3 - 4	\$ 6,159,292	\$ 9,324,274	\$ 11,548,056	\$ 8,341,285	\$ 7,731,530	\$ 4,901,717	
6	Total System kWh Sales	Exhibit 2, page 1	6,734,780,109	8,102,605,011	8,443,024,842	7,621,343,554	6,216,478,500	7,066,717,933	
7	Capacity Related Costs Incurred (¢/kWh)	Line 5 / Line 6* 100	0.0915	0.1151	0.1368	0.1094	0.1244	0.0694	
8	SC Retail Sales kWh	Exhibit 2, page 1	1,623,613,976	1,916,998,453	2,010,846,771	1,877,139,122	1,509,190,428	1,758,086,136	
9	SC Capacity Related Cost Incurred	Line 7 / 100* Line 8	\$ 1,484,876	\$ 2,206,033	\$ 2,750,361	\$ 2,054,461	\$ 1,877,003	\$ 1,219,469	
10	Industrial Capacity Related Cost Allocated by Firm CP	Line 9 * Line 1	\$ 457,210	\$ 679,262	\$ 846,867	\$ 632,591	\$ 577,950	\$ 375,488	
11	SC Industrial kWh Sales	Exhibit 4, page 5	652,255,329	696,208,995	747,791,131	746,959,700	689,987,612	914,273,100	
12	SC Industrial Capacity Related Cost Incurred (¢/kWh)	Line 10 / Line 11 * 100	0.0701	0.0976	0.1132	0.0847	0.0838	0.0411	
13	SC Industrial Billed (¢/kWh)	Company Records	0.0131	0.0131	0.0131	0.0131	0.0387	0.0657	
14	SC Capacity Related (Over) / Under Recovery	(-Line 13 + Line 12)* Line 11 / 100	\$ 371,765	\$ 588,059	\$ 748,906	\$ 534,739	\$ 310,886	\$ (225,189)	
15	(Over) / Under Cumulative Balance May 2020	Prior Year Annual Filing	\$ (710,171)						
16	Accounting Adjustment(s)								
17	Cumulative SC Industrial Capacity Related (Over) / Under Recovery	Line 14+ Line 16 + PM Cum Bal	\$ (338,406)	\$ 249,653	\$ 998,560	\$ 1,533,298	\$ 1,844,185	\$ 1,618,995	

Line No.	Description	Reference	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	Twelve Months Ended May 2021
18	Total PURPA Purchased Power Capacity Costs		\$ 1,081,847	\$ 1,511,405	\$ 1,465,130	\$ 1,363,634	\$ 933,570	\$ 1,454,625	\$ 32,365,359
19	Firm Natural Gas Transportation and Storage Costs		\$ 3,109,163	\$ 4,369,451	\$ 3,661,844	\$ 4,091,905	\$ 3,916,116	\$ 4,489,851	\$ 47,089,335
20	Total Capacity Related Costs	Sum Lines 18-19	\$ 4,191,010	\$ 5,880,856	\$ 5,126,974	\$ 5,455,539	\$ 4,849,686	\$ 5,944,476	\$ 79,454,694
21	Total System kWh Sales	Exhibit 2, page 1	6,272,969,895	8,612,692,842	7,023,124,257	6,159,528,696	6,262,731,991	5,739,755,562	84,255,753,192
22	Capacity Related Costs Incurred (¢/kWh)	Line 20 / Line 21* 100	0.0668	0.0683	0.0730	0.0886	0.0774	0.1036	
23	SC Retail Sales kWh	Exhibit 2, page 1	1,386,684,247	2,046,721,244	1,610,951,313	1,377,957,373	1,468,606,143	1,396,012,579	19,982,807,784
24	SC Capacity Related Cost Incurred	Line 22 / 100 * Line 23	\$ 926,452	\$ 1,397,527	\$ 1,176,016	\$ 1,220,467	\$ 1,137,240	\$ 1,445,793	\$ 18,895,698
25	Industrial Capacity Related Cost Allocated by Firm CP	Line 24 * Line 1 (or Line 2)	\$ 285,265	\$ 408,319	\$ 343,599	\$ 356,587	\$ 332,268	\$ 422,418	\$ 5,717,825
26	SC Industrial kWh Sales	Exhibit 4, page 5	426,068,014	862,432,514	653,393,746	419,435,083	618,950,411	623,335,717	8,051,091,352
27	SC Industrial Capacity Related Cost Incurred (¢/kWh)	Line 25 / Line 26 * 100	0.0670	0.0473	0.0526	0.0850	0.0537	0.0678	
28	SC Industrial Billed (¢/kWh)	Company Records	0.0657	0.0657	0.0657	0.0657	0.0657	0.0657	
29	SC Capacity Related (Over) / Under Recovery	(-Line 28 + Line 27)*Line 26 / 100	\$ 5,338	\$ (158,299)	\$ (85,681)	\$ 81,018	\$ (74,382)	\$ 12,886	\$ 2,110,046
30	Accounting Adjustment(s)								\$ -
31	Cumulative SC Industrial Capacity Related (Over) / Under Recovery	Sum Lines 29-30 + PM Cum Bal	\$ 1,624,334	\$ 1,466,034	\$ 1,380,353	\$ 1,461,371	\$ 1,386,989	\$ 1,399,875	\$ 1,399,875

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - INDUSTRIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.		Industrial						
1	2019 Firm Coincident Peak CP %	30.79%						
2	2020 Firm Coincident Peak CP %	29.22%						
Line No.	Description	Reference	Estimated June 2021	Estimated July 2021	Estimated August 2021	Estimated September 2021	Sixteen Months Ended September 2021	
32	Total PURPA Purchased Power Capacity Costs		\$ 1,975,915	\$ 1,981,523	\$ 2,004,806	\$ 1,848,531	\$ 40,176,134	
33	Firm Natural Gas Transportation and Storage Costs		2,898,127	3,851,695	3,878,797	4,082,051	\$ 61,800,005	
34	Total Capacity Related Costs	Sum Lines 32-33	\$ 4,874,042	\$ 5,833,218	\$ 5,883,602	\$ 5,930,582	\$ 101,976,139	
35	Total System kWh Sales	Exhibit 2, page 2	7,025,575,203	8,271,350,711	8,670,278,197	8,040,495,325	116,263,452,627	
36	Capacity Related Costs Incurred (¢/kWh)	Line 34 / Line 35* 100	0.0694	0.0705	0.0679	0.0738		
37	SC Retail Sales kWh	Exhibit 2, page 2	1,721,298,717	1,995,059,533	2,115,058,217	1,995,845,841	27,810,070,092	
38	SC Capacity Related Cost Incurred	Line 36 / 100* Line 37	\$ 1,194,163	\$ 1,406,979	\$ 1,435,267	\$ 1,472,114	\$ 24,404,221	
39	Industrial Capacity Related Cost Allocated by Firm CP	Line 38 * Line 2	\$ 348,902	\$ 411,081	\$ 419,345	\$ 430,111	\$ 7,327,264	
40	SC Projected Industrial kWh Sales (w/solar)	Exhibit 4, page 6	741,436,403	783,460,731	839,343,723	820,290,951	11,235,623,160	
41	SC Industrial Capacity Related Cost Incurred (¢/kWh)	Line 39 / Line 40 * 100	0.0471	0.0525	0.0500	0.0524		
42	SC Industrial Billed (¢/kWh)	Company Records	0.0657	0.0657	0.0657	0.0657		
43	SC Capacity Related (Over) / Under Recovery	(-Line 42 + Line 41)*Line 40 /100	\$ (138,222)	\$ (103,653)	\$ (132,103)	\$ (108,820)	\$ 1,627,248	
44	Accounting Adjustment(s)						\$ -	
45	Cumulative SC Industrial Capacity Related (Over) / Under Recovery	Sum Lines 43 - 44 + PM Cum Bal	\$ 1,261,653	\$ 1,158,000	\$ 1,025,897	\$ 917,077	\$ 917,077	
46	SC Projected Industrial Sales (October 2021 - September 2022)	Exhibit 3						9,070,560,880
47	SC Industrial Capacity Related Increment / (Decrement) (¢/kWh)	Line 45 / Line 46* 100						0.0101

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
PROJECTED BILLING PERIOD CAPACITY RELATED COSTS
FOR THE 12 MONTHS OCTOBER 2021 TO SEPTEMBER 2022

Line No.	Class	2020 Firm Coincident Peak (CP) KWs	CP %
1	Residential	1,710,195	43.87%
2	General Service / Lighting	1,048,989	26.91%
3	Industrial	1,138,918	29.22%
	Total SC	3,898,103	100.00%

Line No.	Description	Reference	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022
4	Total PURPA Purchased Power Capacity Costs		\$ 1,914,687	\$ 1,793,506	\$ 1,693,952	\$ 1,789,238	\$ 1,844,161	\$ 2,401,301
5	Firm Natural Gas Transportation and Storage Costs		3,997,625	2,770,622	3,217,921	3,827,623	3,389,993	2,759,041
6	Total Capacity Costs	Sum Lines 4 - 5	\$ 5,912,313	\$ 4,564,128	\$ 4,911,873	\$ 5,616,861	\$ 5,234,154	\$ 5,160,342
7	Total Projected System Sales kWhs (w/solar)	Exhibit 5	6,742,888,463	6,307,192,256	7,057,992,507	7,912,246,762	7,911,930,175	7,308,710,605
8	Capacity Related System Costs Incurred (¢/kWh)	Line 6 / Line 7 *100	0.0877	0.0724	0.0696	0.0710	0.0662	0.0706
9	Projected SC Retail Sales kWh (w/solar)	Exhibit 5	1,671,642,168	1,556,592,468	1,692,017,820	1,889,749,163	1,922,532,518	1,802,251,595
10	SC Capacity Related Costs Incurred	Line 8 / 100 * Line 9	\$ 1,465,733	\$ 1,126,411	\$ 1,177,527	\$ 1,341,523	\$ 1,271,855	\$ 1,272,486

Line No.	Description	Reference	April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	Billing Period Twelve Months Ended September 2022
11	Total PURPA Purchased Power Capacity Costs		\$ 2,568,868	\$ 2,970,531	\$ 3,020,348	\$ 3,060,809	\$ 3,070,794	\$ 2,606,590	\$ 28,734,785
12	Firm Natural Gas Transportation and Storage Costs		4,241,356	4,464,749	4,209,794	4,190,061	4,247,924	4,340,254	45,656,964
13	Total Capacity Costs	Sum Lines 11 - 12	\$ 6,810,224	\$ 7,435,281	\$ 7,230,142	\$ 7,250,870	\$ 7,318,718	\$ 6,946,844	\$ 74,391,749
14	Total Projected System Sales kWhs (w/solar)	Exhibit 5	6,605,549,360	6,323,257,933	7,091,353,562	8,292,665,926	8,744,695,201	8,162,715,217	88,461,197,969
15	Capacity Related System Costs Incurred (¢/kWh)	Line 13 / Line 14 *100	0.1031	0.1176	0.1020	0.0874	0.0837	0.0851	
16	Projected SC Retail Sales kWh (w/solar)	Exhibit 5	1,670,721,121	1,587,865,456	1,734,682,355	1,998,272,611	2,131,507,681	2,022,434,802	21,680,269,758
17	SC Capacity Related Costs Incurred	Line 15 / 100 * Line 16	\$ 1,722,489	\$ 1,867,111	\$ 1,768,633	\$ 1,747,232	\$ 1,783,928	\$ 1,721,185	\$ 18,266,112
SC Capacity Related Costs Allocated on Firm CP kW's									
18	Residential	Total Line 17 * Line 1							\$ 8,013,800
19	General Service / Lighting	Total Line 17 * Line 2							\$ 4,915,457
20	Industrial	Total Line 17 * Line 3							\$ 5,336,855
21	Total SC	Sum Lines 18 through 20							\$ 18,266,112
Projected SC Retail Sales kWh (October 2021 - September 2022)									
22	Residential	Exhibit 5							6,869,069,305
23	General Service / Lighting	Exhibit 5							5,852,891,838
24	Industrial	Exhibit 5							9,070,560,880
25	Total SC	Sum Lines 22 through 24							21,792,522,023
SC Capacity Related Costs ¢/kWh									
26	Residential	Line 18 / Line 22 * 100							0.1167
27	General Service / Lighting	Line 19 / Line 23 * 100							0.0840
28	Industrial	Line 20 / Line 24 * 100							0.0588

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
ACTUAL AND ESTIMATED DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL COSTS
FOR THE PERIOD JUNE 2020 - SEPTEMBER 2021

Line No.	Description	Reference	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020
DERP Incremental Costs								
1	Purchased Power Agreements		\$ 10,156	\$ 8,671	\$ 63,402	\$ 30,084	\$ (53,001)	\$ 13,760
2	DERP NEM Incentive		378,634	384,044	390,568	398,616	515,030	651,727
3	Solar Rebate Program - Amortization		19,708	19,798	19,619	27,882	27,882	27,882
4	Solar Rebate Program - Carrying Costs		18,356	18,292	18,096	22,063	25,941	25,483
5	Shared Solar Program		30,915	31,455	34,012	30,274	21,423	19,338
6	NEM Avoided Capacity Costs		38,026	38,334	38,741	39,280	20,866	358
7	NEM Meter Costs		62,181	62,593	63,155	63,873	64,304	64,735
8	General and Administrative Expenses		24,835	36,913	17,185	(29,863)	13,860	79
9	Interest on capped Industrial undercollection		-	-	-	-	32	65
10	Total DERP Incremental Costs	Sum Lines 1 - 9	\$ 582,811	\$ 600,099	\$ 644,778	\$ 582,206	\$ 636,337	\$ 803,428
11	Revenue Collected	Company Record	\$ 614,237	\$ 617,221	\$ 615,229	\$ 614,573	\$ 658,693	\$ 722,099
12	SC DERP Incremental (Over)/Under Recovery	Line 10 - Line 11	\$ (31,426)	\$ (17,122)	\$ 29,549	\$ (32,367)	\$ (22,356)	\$ 81,330
13	(Over)/Under Cumulative Balance-May 2020	Prior Year annual filing	\$ (2,906,930)					
14	Accounting Adjustment(s)							
15	Cumulative SC DERP Incremental (Over)/ Under Recovery	Line 12 + Line 14 + PM Cum Bal	\$ (2,938,356)	\$ (2,955,478)	\$ (2,925,929)	\$ (2,958,296)	\$ (2,980,652)	\$ (2,899,322)

Line No.	Description	Reference	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	Twelve Months Ended May 2021
DERP Incremental Costs									
16	Purchased Power Agreements		\$ 4,672	\$ 47,764	\$ 14,023	\$ 24,765	\$ 125,130	\$ 67,684	\$ 357,110
17	DERP NEM Incentive		660,851	669,661	\$ 675,954	\$ 678,773	685,187	685,187	6,774,233
18	Solar Rebate Program - Amortization		28,455	28,450	\$ 31,106	\$ 31,577	30,903	30,903	324,164
19	Solar Rebate Program - Carrying Costs		25,766	25,887	\$ 27,034	\$ 28,398	28,127	27,628	291,070
20	Shared Solar Program		13,421	6,914	\$ 7,545	\$ 9,285	16,124	54,157	274,863
21	NEM Avoided Capacity Costs		-	-	\$ -	\$ -	-	-	175,606
22	NEM Meter Costs		65,055	65,475	\$ 66,313	\$ 65,756	66,371	66,371	776,184
23	General and Administrative Expenses		29,843	22,489	\$ 20,091	\$ 22,348	28,485	17,060	203,324
24	Interest on capped Industrial undercollection		\$ 77	65	70	80	122	97	607
25	Total DERP Incremental Costs	Sum Lines 16 - 24	\$ 828,140	\$ 866,706	\$ 842,138	\$ 860,981	\$ 980,449	\$ 949,089	9,177,160
26	Revenue Collected	Company Record	\$ 710,233	\$ 719,962	\$ 638,564	\$ 711,003	\$ 702,098	\$ 708,868	8,032,780
27	SC DERP Incremental (Over)/Under Recovery	Line 25 - Line 26	\$ 117,907	\$ 146,744	\$ 203,574	\$ 149,978	\$ 278,351	\$ 240,221	1,144,380
28	Accounting Adjustment(s)								\$ -
29	Cumulative SC DERP Incremental (Over)/ Under Recovery	Sum Lines 27-28 + PM Cum Bal	\$ (2,781,415)	\$ (2,634,671)	\$ (2,431,097)	\$ (2,281,119)	\$ (2,002,768)	\$ (1,762,547)	\$ (1,762,550)

Note (1) Adjustments represent prior period adjustments reflected in the monthly Schedule 4 filings.
Note (2) Totals may not add due to rounding

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
ACTUAL AND ESTIMATED DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL COSTS
FOR THE PERIOD JUNE 2020 - SEPTEMBER 2021

Line No.	Description	Reference	Estimated June 2021	Estimated July 2021	Estimated August 2021	Estimated September 2021	Sixteen Months Ended September 2021
	DERP Incremental Costs						
30	Purchased Power Agreements		\$ 116,299	\$ 115,563	\$ 112,440	\$ 97,057	\$ 798,469
31	DERP NEM Incentive		618,966	618,711	618,449	618,186	\$ 9,248,545
32	Solar Rebate Program - Amortization		30,636	30,636	30,636	30,636	\$ 446,708
33	Solar Rebate Program - Carrying Costs		24,493	24,326	24,159	23,993	\$ 388,042
34	Shared Solar Program		19,524	19,207	18,106	12,512	\$ 344,212
35	NEM Avoided Capacity Costs		-	-	-	-	\$ 175,606
36	NEM Meter Costs		72,099	72,099	72,099	72,099	\$ 1,064,580
37	General and Administrative Expenses		16,704	16,704	16,704	16,704	\$ 270,139
38	Interest on capped Industrial undercollection		336	335	332	314	\$ 1,924
39	Total DERP Incremental Costs	Sum Lines 30 - 38	\$ 899,057	\$ 897,581	\$ 892,925	\$ 871,500	\$ 12,738,223
40	Estimated Revenue Collected		\$ 706,847	\$ 707,291	\$ 707,761	\$ 708,239	\$ 10,862,918
41	SC DERP Incremental (Over)/Under Recovery	Line 39 - Line 40	\$ 192,211	\$ 190,291	\$ 185,163	\$ 163,261	\$ 1,875,305
42	Accounting Adjustment(s)						\$ -
43	Cumulative SC DERP Incremental (Over)/ Under Recovery	Sum Lines 41-42 + PM Cum Bal	\$ (1,570,337)	\$ (1,380,046)	\$ (1,194,883)	\$ (1,031,622)	\$ (1,031,625)

Note (1) Totals may not add due to rounding

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF DERP INCREMENTAL COSTS (OVER)/UNDER RECOVERY BILLING FACTORS
FOR THE PERIOD JUNE 2020 - SEPTEMBER 2021

		Cumulative Balance (Over)/Under Recovery at September 2021
1 Cumulative DERP Incremental (Over)/ Under Recovery Balance	Exhibit 8, Page 2, Line 43	\$ (1,031,625)

	Firm Peak Demand - 2020	Cumulative Balance (Over)/Under Recovery at September 2021	(Over)/Under Recovery Allocated per Firm Peak Demand
Allocation of DERP Incremental (Over)/Under Recovery			
2 Residential	43.87%		\$ (452,599)
3 General Service / Lighting	26.91%		(277,613)
4 Industrial	29.22%		(301,412)
5 Total	100.00%	\$ (1,031,625)	\$ (1,031,625)

	(Over)/Under Recovery Allocated per Firm Peak Demand	Projected Number of Accounts in Billing Period	\$ per Account per Year	\$ per Account per Month
6 Residential	\$ (452,599)	519,905	\$ (0.87)	\$ (0.07)
7 General Service / Lighting	(277,613)	79,748	\$ (3.48)	\$ (0.29)
8 Industrial	(301,412)	1,482	\$ (203.38)	\$ (16.95)
9 Total	\$ (1,031,625)	601,135		

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
PROJECTED DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL COSTS
FOR THE 12 MONTHS OCTOBER 2021 TO SEPTEMBER 2022

Line No.	Description	Reference	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022
<u>DERP Incremental Costs</u>								
1	Purchased Power Agreements		\$ 90,158	\$ 76,835	\$ 67,886	\$ 74,880	\$ 74,592	\$ 99,253
2	DERP NEM Incentive		\$ 617,932	\$ 617,670	\$ 617,416	\$ 617,154	\$ 616,892	\$ 616,655
3	Solar Rebate Program - Amortization		\$ 30,636	\$ 30,636	\$ 30,636	\$ 30,636	\$ 30,636	\$ 30,636
4	Solar Rebate Program - Carrying Costs		\$ 23,826	\$ 23,659	\$ 23,492	\$ 23,325	\$ 23,158	\$ 22,991
5	Shared Solar Program		\$ 10,008	\$ 5,123	\$ 1,791	\$ 4,398	\$ 4,285	\$ 13,394
6	NEM Avoided Capacity Costs		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	NEM Meter Costs		\$ 72,099	\$ 72,099	\$ 72,099	\$ 72,099	\$ 72,099	\$ 72,099
8	General and Administrative Expenses		\$ 16,704	\$ 16,704	\$ 16,704	\$ 15,022	\$ 15,022	\$ 15,022
9	Interest on Capped Industrial Under-collection		\$ 343	\$ 344	\$ 358	\$ 395	\$ 405	\$ 432
10	Total DERP Incremental Costs	Sum Lines 1 - 9	\$ 861,706	\$ 843,069	\$ 830,381	\$ 837,908	\$ 837,089	\$ 870,482

Line No.	Description	Reference	April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	Billing Period Twelve Months Ended September 2022
<u>DERP Incremental Costs</u>									
11	Purchased Power Agreements		\$ 109,103	\$ 116,789	\$ 115,719	\$ 114,987	\$ 111,879	\$ 96,573	\$ 1,148,652
12	DERP NEM Incentive		\$ 616,393	\$ 616,140	\$ 615,878	\$ 615,625	\$ 615,364	\$ 615,103	\$ 7,398,223
13	Solar Rebate Program - Amortization		\$ 30,636	\$ 30,636	\$ 30,636	\$ 30,636	\$ 30,636	\$ 30,636	\$ 367,631
14	Solar Rebate Program - Carrying Costs		\$ 22,824	\$ 22,657	\$ 22,490	\$ 22,324	\$ 22,157	\$ 21,990	\$ 274,892
15	Shared Solar Program		\$ 16,975	\$ 19,758	\$ 19,310	\$ 18,995	\$ 17,900	\$ 12,334	\$ 144,270
16	NEM Avoided Capacity Costs		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	NEM Meter Costs		\$ 72,099	\$ 72,099	\$ 72,099	\$ 72,099	\$ 72,099	\$ 72,099	\$ 865,187
18	General and Administrative Expenses		\$ 15,022	\$ 15,022	\$ 15,022	\$ 15,022	\$ 15,022	\$ 15,022	\$ 185,314
19	Interest on Capped Industrial Under-collection		\$ 452	\$ 324	\$ 336	\$ 335	\$ 332	\$ 314	\$ 4,369
20	Total DERP Incremental Costs	Sum Lines 11 - 19	\$ 883,505	\$ 893,426	\$ 891,491	\$ 890,023	\$ 885,388	\$ 864,070	\$ 10,388,539

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF DERP PROJECTED BILLING PERIOD COST FACTORS
FOR THE PERIOD OCTOBER 2021 - SEPTEMBER 2022

		October 2021 through September 2022			
1 Total DERP Projected Incremental Costs		Exhibit 10, Line 20	\$ 10,388,539		
Allocation of DERP Incremental Costs		Firm Peak Demand - 2020	October 2021 through September 2022	Cost Allocated per Firm Peak Demand	
2 Residential		43.87%		\$ 4,557,711	
3 General Service / Lighting		26.91%		2,795,582	
4 Industrial		29.22%		3,035,245	
5 Total		100.00%	\$ 10,388,539	\$ 10,388,539	
		Total Cost Allocated per Firm Peak Demand	Projected Number of Accounts in Billing Period	\$ per Account per Year	\$ per Account per Month
6 Residential		\$ 4,557,711	519,905	\$ 8.77	\$ 0.73
7 General Service / Lighting		2,795,582	79,748	\$ 35.06	\$ 2.92
8 Industrial		3,035,245	1,482	\$ 2,048.07	\$ 170.67
9 Total		\$ 10,388,539	601,135		

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - RESIDENTIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2022

Line No.	Description	Reference	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020
		Residential						
1	2019 Firm Coincident Peak CP %	40.90%						
2	2020 Firm Coincident Peak CP %	43.87%						
3	Purchased Power Agreements		\$ 98,663	\$ 12,369	\$ 114,940	\$ 50,963	\$ 74,661	\$ 56,092
4	Shared Solar Program		28,241	30,525	33,152	27,688	23,228	21,608
5	Total DERP Avoided Costs	Sum Lines 3 - 4	\$ 126,904	\$ 42,894	\$ 148,092	\$ 78,652	\$ 97,889	\$ 77,700
6	Total System kWh Sales	Exhibit 2, page 1	6,734,780,109	8,102,605,011	8,443,024,842	7,621,343,554	6,216,478,500	7,066,717,933
7	DERP Avoided System Cost - (¢/kWh)	Line 5 / Line 6* 100	0.0019	0.0005	0.0018	0.0010	0.0016	0.0011
8	SC Retail Sales kWh	Exhibit 2, page 1	1,623,613,976	1,916,998,453	2,010,846,771	1,877,139,122	1,509,190,428	1,758,086,136
9	SC DERP Avoided Costs	Line 7 / 100 * Line 8	\$ 30,594	\$ 10,148	\$ 35,270	\$ 19,372	\$ 23,765	\$ 19,330
10	Residential DERP Avoided Costs Allocated by Firm CP	Line 9 * Line 1	\$ 12,513	\$ 4,151	\$ 14,426	\$ 7,923	\$ 9,720	\$ 7,906
11	SC Residential kWh Sales	Exhibit 4, page 1	531,862,162	707,354,351	738,300,056	626,104,018	404,250,903	422,236,888
12	SC Residential DERP Avoided Cost (¢/kWh)	Line 10 / Line 11 * 100	0.0024	0.0006	0.0020	0.0013	0.0024	0.0019
13	SC Residential Rate Billed (¢/kWh)	Company Records	0.0026	0.0026	0.0026	0.0026	0.0030	0.0034
14	SC DERP Avoided Cost (Over) / Under Recovery	(Line 12 - Line 13) * Line 11 / 100	\$ (1,315)	\$ (14,240)	\$ (4,770)	\$ (8,356)	\$ (2,365)	\$ (6,450)
15	(Over) / Under Cumulative Balance May 2020	Prior Year Annual Filing	\$ (59,929)					
16	Accounting Adjustment(s)							
17	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 14 + Line 16 + PM Cum Bal	\$ (61,244)	\$ (75,483)	\$ (80,253)	\$ (88,609)	\$ (90,974)	\$ (97,423)

Line No.	Description	Reference	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	Twelve Months Ended May 2021
18	Purchased Power Agreements		\$ 25,100	\$ 149,314	\$ 56,285	\$ 158,538	\$ 211,147	\$ 141,484	\$ 1,149,557
19	Shared Solar Program		17,324	13,905	15,203	15,873	22,147	31,614	280,507
20	Total DERP Avoided Costs	Sum Lines 18 - 19	\$ 42,423	\$ 163,219	\$ 71,488	\$ 174,411	\$ 233,293	\$ 173,099	\$ 1,430,065
21	Total System kWh Sales	Exhibit 2, page 1	6,272,969,895	8,612,692,842	7,023,124,257	6,159,528,696	6,262,731,991	5,739,755,562	84,255,753,192
22	DERP Avoided System Cost - (¢/kWh)	Line 20 / Line 21* 100	0.0007	0.0019	0.0010	0.0028	0.0037	0.0030	
23	SC Retail Sales kWh	Exhibit 2, page 1	1,386,684,247	2,046,721,244	1,610,951,313	1,377,957,373	1,468,606,143	1,396,012,579	19,982,807,784
24	SC DERP Avoided Costs	Line 22 / 100 * Line 23	\$ 9,378	\$ 38,787	\$ 16,398	\$ 39,018	\$ 54,707	\$ 42,101	\$ 338,869
25	Residential DERP Avoided Costs Allocated by Firm CP	Line 24 * Line 1 (or Line 2)	\$ 3,836	\$ 17,017	\$ 7,194	\$ 17,118	\$ 24,001	\$ 18,471	\$ 144,277
26	SC Residential kWh Sales	Exhibit 4, page 1	574,708,890	727,413,286	575,946,759	566,001,840	463,487,443	390,767,385	6,728,433,981
27	SC Residential DERP Avoided Cost (¢/kWh)	Line 25 / Line 26 * 100	0.0007	0.0023	0.0012	0.0030	0.0052	0.0047	
28	SC Residential Rate Billed (¢/kWh)	Company Records	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	
29	SC DERP Avoided Cost (Over) / Under Recovery	(Line 27 - Line 28) * Line 26 / 100	\$ (15,704)	\$ (7,715)	\$ (12,388)	\$ (2,126)	\$ 8,242	\$ 5,185	\$ (62,003)
30	Accounting Adjustment(s)								\$ -
31	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Sum Lines 29-30 + PM Cum Bal	\$ (113,128)	\$ (120,843)	\$ (133,231)	\$ (135,357)	\$ (127,115)	\$ (121,931)	\$ (121,931)

Totals may not add due to rounding

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - RESIDENTIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.		Residential							
1	2019 Firm Coincident Peak CP %	40.90%							
2	2020 Firm Coincident Peak CP %	43.87%							
Line No.	Description	Reference	Estimated June 2021	Estimated July 2021	Estimated August 2021	Estimated September 2021	Sixteen Months Ended September 2021		
32	Purchased Power Agreements		\$ 303,446	\$ 301,482	\$ 293,383	\$ 253,320	\$ 2,301,187		
33	Shared Solar Program		25,563	25,374	24,717	21,381	377,542		
34	Total DERP Avoided Costs	Sum Lines 32-33	\$ 329,009	\$ 326,855	\$ 318,100	\$ 274,701	\$ 2,678,729		
35	Total Projected System Sales kWhs (w/solar)	Exhibit 2, page 2	7,025,575,203	8,271,350,711	8,670,278,197	8,040,495,325	116,263,452,627		
36	DERP Avoided System Cost (¢/kWh)	Line 34 / Line 35* 100	0.0047	0.0040	0.0037	0.0034			
37	Projected SC Retail Sales kWh (w/solar)	Exhibit 2, page 2	1,721,298,717	1,995,059,533	2,115,058,217	1,995,845,841	27,810,070,092		
38	SC DERP Avoided Costs	Line 36 / 100 * Line 37	\$ 80,609	\$ 78,838	\$ 77,599	\$ 68,187	\$ 644,101		
39	Residential DERP Avoided Costs Allocated by Firm CP	Line 38 * Line 2	\$ 35,365	\$ 34,588	\$ 34,044	\$ 29,916	\$ 278,191		
40	SC Projected Residential kWh Sales (w/solar)	Exhibit 4, page 2	490,472,137	656,906,123	701,106,219	628,335,508	9,205,253,967		
41	SC Residential DERP Avoided Cost (¢/kWh)	Line 39 / Line 40 * 100	0.0072	0.0053	0.0049	0.0048			
42	SC Residential Rate Billed (¢/kWh)	Company Records	0.0034	0.0034	0.0034	0.0034			
43	SC DERP Avoided Cost (Over) / Under Recovery	(Line 41 - Line 42) * Line 40 / 100	\$ 18,689	\$ 12,253	\$ 10,207	\$ 8,552	\$ (12,301)		
44	Accounting Adjustment(s)						\$ -		
45	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Sum Lines 43-44 + PM Cum Bal	\$ (103,242)	\$ (90,988)	\$ (80,781)	\$ (72,229)	\$ (72,229)		
46	SC Projected Residential Sales (October 2021-September 2022)	Exhibit 3						6,869,069,305	
47	SC Residential DERP AC Increment / (Decrement) (¢/kWh)	Line 45 / Line 46* 100						(0.0011)	

Totals may not add due to rounding

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - GENERAL SERVICE / LIGHTING
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.	Description	Reference	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020
General Service / Lighting								
1	2019 Firm Coincident Peak CP %	28.31%						
2	2020 Firm Coincident Peak CP %	26.91%						
3	Purchased Power Agreements		\$ 98,663	\$ 12,369	\$ 114,940	\$ 50,963	\$ 74,661	\$ 56,092
4	Shared Solar Program		\$ 28,241	\$ 30,525	\$ 33,152	\$ 27,688	\$ 23,228	\$ 21,608
5	Total DERP Avoided Costs	Sum Lines 3 - 4	\$ 126,904	\$ 42,894	\$ 148,092	\$ 78,652	\$ 97,889	\$ 77,700
6	Total System kWh Sales	Exhibit 2, page 1	6,734,780,109	8,102,605,011	8,443,024,842	7,621,343,554	6,216,478,500	7,066,717,933
7	DERP Avoided System Cost - (¢/kWh)	Line 5 / Line 6* 100	0.0019	0.0005	0.0018	0.0010	0.0016	0.0011
8	SC Retail Sales kWh	Exhibit 2, page 1	1,623,613,976	1,916,998,453	2,010,846,771	1,877,139,122	1,509,190,428	1,758,086,136
9	SC DERP Avoided Costs	Line 7 / 100 * Line 8	\$ 30,594	\$ 10,148	\$ 35,270	\$ 19,372	\$ 23,765	\$ 19,330
10	General Service/Lighting DERP Avoided Costs Allocated by Firm CP	Line 9 * Line 1	\$ 8,660	\$ 2,873	\$ 9,984	\$ 5,484	\$ 6,727	\$ 5,472
11	SC General Service/Lighting kWh Sales	Exhibit 4, page 3	439,496,485	513,435,107	524,755,584	504,075,404	414,951,913	421,576,148
12	SC General Service/Lighting DERP Avoided Cost (¢/kWh)	Line 10 / Line 11 * 100	0.0020	0.0006	0.0019	0.0011	0.0016	0.0013
13	SC General Service/Lighting Rate Billed (¢/kWh)	Company Records	0.0012	0.0012	0.0012	0.0012	0.0022	0.0033
14	SC DERP Avoided Cost (Over) / Under Recovery	(Line 12 - Line 13) * Line 11 / 100	\$ 3,386	\$ (3,288)	\$ 3,687	\$ (565)	\$ (2,494)	\$ (8,440)
15	(Over) / Under Cumulative Balance May 2020	Prior Year Annual Filing	\$ (26,225)					
16	Accounting Adjustment(s)							
17	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 14 + Line 16 + PM Cum Bal	\$ (22,839)	\$ (26,126)	\$ (22,439)	\$ (23,004)	\$ (25,499)	\$ (33,939)

Line No.	Description	Reference	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	Twelve Months Ended May 2021
18	Purchased Power Agreements		\$ 25,100	\$ 149,314	\$ 56,285	\$ 158,538	\$ 211,147	\$ 141,484	\$ 1,149,557
19	Shared Solar Program		\$ 17,324	\$ 13,905	\$ 15,203	\$ 15,873	\$ 22,147	\$ 31,614	\$ 280,507
20	Total DERP Avoided Costs	Sum Lines 18 - 19	\$ 42,423	\$ 163,219	\$ 71,488	\$ 174,411	\$ 233,293	\$ 173,099	\$ 1,430,064
21	Total System kWh Sales	Exhibit 2, page 1	6,272,969,895	8,612,692,842	7,023,124,257	6,159,528,696	6,262,731,991	5,739,755,562	84,255,753,192
22	DERP Avoided System Cost - (¢/kWh)	Line 20 / Line 21* 100	0.0007	0.0019	0.0010	0.0028	0.0037	0.0030	
23	SC Retail Sales kWh	Exhibit 2, page 1	1,386,684,247	2,046,721,244	1,610,951,313	1,377,957,373	1,468,606,143	1,396,012,579	19,982,807,784
24	SC DERP Avoided Costs	Line 22 / 100 * Line 23	\$ 9,378	\$ 38,787	\$ 16,398	\$ 39,018	\$ 54,707	\$ 42,101	\$ 338,869
25	General Service/Lighting DERP Avoided Costs Allocated by Firm CP	Line 24 * Line 1 (or Line 2)	\$ 2,655	\$ 10,438	\$ 4,413	\$ 10,500	\$ 14,722	\$ 11,329	\$ 93,256
26	SC General Service/Lighting kWh Sales	Exhibit 4, page 3	385,907,343	456,875,444	381,610,808	392,520,450	386,168,289	381,909,477	5,203,282,451
27	SC General Service/Lighting DERP Avoided Cost (¢/kWh)	Line 25 / Line 26 * 100	0.0007	0.0023	0.0012	0.0027	0.0038	0.0030	
28	SC General Service/Lighting Rate Billed (¢/kWh)	Company Records	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	
29	SC DERP Avoided Cost (Over) / Under Recovery	(Line 27 - Line 28) * Line 26 / 100	\$ (10,080)	\$ (4,639)	\$ (8,180)	\$ (2,453)	\$ 1,978	\$ (1,274)	\$ (32,362)
30	Accounting Adjustment(s)								\$ -
31	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Sum Lines 29-30 + PM Cum Bal	\$ (44,019)	\$ (48,658)	\$ (56,839)	\$ (59,292)	\$ (57,314)	\$ (58,587)	\$ (58,587)

Totals may not add due to rounding

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - GENERAL SERVICE / LIGHTING
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.			General Service / Lighting						
1		2019 Firm Coincident Peak CP %	28.31%						
2		2020 Firm Coincident Peak CP %	26.91%						
Line No.	Description	Reference	Estimated June 2021	Estimated July 2021	Estimated August 2021	Estimated September 2021	Sixteen Months Ended September 2021		
32	Purchased Power Agreements		\$ 303,446	\$ 301,482	\$ 293,383	\$ 253,320	\$ 2,301,187		
33	Shared Solar Program		\$ 25,563	\$ 25,374	\$ 24,717	\$ 21,381	\$ 377,542		
34	Total DERP Avoided Costs	Sum Lines 32-33	\$ 329,009	\$ 326,855	\$ 318,100	\$ 274,701	\$ 2,678,729		
35	Total Projected System Sales kWhs (w/solar)	Exhibit 2, page 2	7,025,575,203	8,271,350,711	8,670,278,197	8,040,495,325	116,263,452,627		
36	DERP Avoided System Cost (¢/kWh)	Line 34 / Line 35* 100	0.0047	0.0040	0.0037	0.0034			
37	Projected SC Retail Sales kWh	Exhibit 2, page 2	1,721,298,717	1,995,059,533	2,115,058,217	1,995,845,841	27,810,070,092		
38	SC DERP Avoided Costs	Line 36 / 100 * Line 37	\$ 80,609	\$ 78,838	\$ 77,599	\$ 68,187	\$ 644,101		
39	General Service/Lighting DERP Avoided Costs Allocated by Firm CP	Line 38 * Line 2	\$ 21,692	\$ 21,215	\$ 20,882	\$ 18,349	\$ 175,395		
40	SC General Service/Lighting kWh Sales	Exhibit 4, page 4	489,390,177	554,692,679	574,608,275	547,219,382	7,369,192,964		
41	SC General Service/Lighting DERP Avoided Cost (¢/kWh)	Line 39 / Line 40 * 100	0.0044	0.0038	0.0036	0.0034			
42	SC General Service/Lighting Rate Billed (¢/kWh)	Company Records	0.0033	0.0033	0.0033	0.0033			
43	SC DERP Avoided Cost (Over) / Under Recovery	(Line 41 - Line 42) * Line 40 / 100	\$ 5,542	\$ 2,911	\$ 1,920	\$ 291	\$ (21,699)		
44	Accounting Adjustment(s)						\$ -		
45	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Sum Lines 43-44 + PM Cum Bal	\$ (53,045)	\$ (50,135)	\$ (48,215)	\$ (47,924)	\$ (47,924)		
46	SC Projected General Service / Lighting Sales (October 2021 - September 2022)	Exhibit 3						5,852,891,838	
47	SC General Service/Lighting DERP AC Increment / (Decrement) (¢/kWh)	Line 45 / Line 46* 100						(0.0008)	

Totals may not add due to rounding

Line No.

Line No.	Description	Reference	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	Twelve Months Ended May 2021
18	Purchased Power Agreements		\$ 25,100	\$ 149,314	\$ 56,285	\$ 158,538	\$ 211,147	\$ 141,484	\$ 1,149,557
19	Shared Solar Program		\$ 17,324	\$ 13,905	\$ 15,203	\$ 15,873	\$ 22,147	\$ 31,614	280,507
20	Total DERP Avoided Costs	Sum Lines 18-19	\$ 42,423	\$ 163,219	\$ 71,488	\$ 174,411	\$ 233,293	\$ 173,099	\$ 1,430,064
21	Total System kWh Sales	Exhibit 2, page 1	6,272,969,895	8,612,692,842	7,023,124,257	6,159,528,696	6,262,731,991	5,739,755,562	84,255,753,192
22	DERP Avoided System Cost - (¢/kWh)	Line 20 / Line 21* 100	0.0007	0.0019	0.0010	0.0028	0.0037	0.0030	
23	SC Retail Sales kWh	Exhibit 2, page 1	1,386,684,247	2,046,721,244	1,610,951,313	1,377,957,373	1,468,606,143	1,396,012,579	19,982,807,784
24	SC DERP Avoided Costs	Line 22 / 100 * Line 23	\$ 9,378	\$ 38,787	\$ 16,398	\$ 39,018	\$ 54,707	\$ 42,101	\$ 338,869
25	Industrial DERP Avoided Costs Allocated by Firm CP	Line 24 * Line 1 (or Line 2)	\$ 2,888	\$ 11,333	\$ 4,791	\$ 11,400	\$ 15,984	\$ 12,301	\$ 101,335
26	SC Industrial kWh Sales	Exhibit 4, page 5	426,068,014	862,432,514	653,393,746	419,435,083	618,950,411	623,335,717	8,051,091,352
27	SC Industrial DERP Avoided Cost (¢/kWh)	Line 25 / Line 26 * 100	0.0007	0.0013	0.0007	0.0027	0.0026	0.0020	
28	SC Industrial Rate Billed (¢/kWh)	Company Records	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	
29	SC DERP Avoided Cost (Over) / Under Recovery	(Line 27 - Line 28) * Line 26 / 100	\$ (7,338)	\$ (9,365)	\$ (10,890)	\$ 1,334	\$ 1,129	\$ (2,659)	\$ (37,536)
30	Accounting Adjustment(s)								\$ -
31	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Sum Lines 29-30 + PM Cum Bal	\$ (48,531)	\$ (57,895)	\$ (68,786)	\$ (67,451)	\$ (66,322)	\$ (68,982)	\$ (68,982)

Totals may not add due to rounding

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - INDUSTRIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2020 - SEPTEMBER 2021

Line No.		Industrial						
1	2019 Firm Coincident Peak CP %	30.79%						
2	2020 Firm Coincident Peak CP %	29.22%						
Line No.	Description	Reference	Estimated June 2021	Estimated July 2021	Estimated August 2021	Estimated September 2021	Sixteen Months Ended September 2021	
32	Purchased Power Agreements		\$ 303,446	\$ 301,482	\$ 293,383	\$ 253,320	\$ 2,301,187	
33	Shared Solar Program		25,563	25,374	24,717	21,381	\$ 377,542	
34	Total DERP Avoided Costs	Sum Lines 32-33	\$ 329,009	\$ 326,855	\$ 318,100	\$ 274,701	\$ 2,678,729	
35	Total System kWh Sales	Exhibit 2, page 2	7,025,575,203	8,271,350,711	8,670,278,197	8,040,495,325	116,263,452,627	
36	DERP Avoided System Cost - (¢/kWh)	Line 34 / Line 35* 100	0.0047	0.0040	0.0037	0.0034	0.0023	
37	SC Retail Sales kWh	Exhibit 2, page 2	1,721,298,717	1,995,059,533	2,115,058,217	1,995,845,841	27,810,070,092	
38	SC DERP Avoided Costs	Line 36 / 100 * Line 37	\$ 80,609	\$ 78,838	\$ 77,599	\$ 68,187	\$ 644,101	
39	Industrial DERP Avoided Costs Allocated by Firm CP	Line 38 * Line 2	\$ 23,552	\$ 23,034	\$ 22,672	\$ 19,922	\$ 190,516	
40	SC Industrial kWh Sales	Exhibit 4, page 6	741,436,403	783,460,731	839,343,723	820,290,951	11,235,623,160	
41	SC Industrial DERP Avoided Cost (¢/kWh)	Line 39 / Line 40 * 100	0.0032	0.0029	0.0027	0.0024		
42	SC Industrial Rate Billed (¢/kWh)	Company Records	0.0024	0.0024	0.0024	0.0024		
43	SC DERP Avoided Cost (Over) / Under Recovery	(Line 41 - Line 42) * Line 40 / 100	\$ 5,757	\$ 4,231	\$ 2,528	\$ 236	\$ (24,784)	
44	Accounting Adjustment(s)						\$ -	
45	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Sum Lines 43-44 + PM Cum Bal	\$ (63,224)	\$ (58,993)	\$ (56,465)	\$ (56,230)	\$ (56,230)	
46	SC Projected Industrial Sales (October 2021 - September 2022)	Exhibit 3					9,070,560,880	
47	SC Industrial DERP AC Increment / (Decrement) (¢/kWh)	Line 45 / Line 46* 100					(0.0006)	

Totals may not add due to rounding

DUKE ENERGY CAROLINAS, LLC
SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF PROJECTED BILLING PERIOD DERP AVOIDED COST BILLING FACTORS
FOR THE 12 MONTHS OCTOBER 2021 TO SEPTEMBER 2022

Line No.	Class	2020 Firm Coincident Peak (CP) KWs	CP %
1	Residential	1,710,195	43.87%
2	General Service / Lighting	1,048,989	26.91%
3	Industrial	1,138,918	29.22%
	Total SC	3,898,103	100%

Line No.	Description	Reference	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022
4	Purchased Power Agreements		\$ 235,357	\$ 200,619	\$ 177,235	\$ 195,513	\$ 194,756	\$ 259,121
5	Shared Solar Program		19,888	16,974	14,986	16,541	16,474	21,907
6	Total DERP Avoided Costs	Sum Lines 4 - 5	\$ 255,245	\$ 217,593	\$ 192,222	\$ 212,055	\$ 211,230	\$ 281,028
7	Total Projected System Sales kWhs (w/solar)	Exhibit 7	6,742,888,463	6,307,192,256	7,057,992,507	7,912,246,762	7,911,930,175	7,308,710,605
8	DERP Avoided System Cost - (¢/kWh)	Line 6 / Line 7 * 100	0.0038	0.0034	0.0027	0.0027	0.0027	0.0038
9	Projected SC Retail Sales kWh (w/solar)	Exhibit 7	1,671,642,168	1,556,592,468	1,692,017,820	1,889,749,163	1,922,532,518	1,802,251,595
10	SC DERP Avoided Costs	Line 8 / 100 * Line 9	\$ 63,278	\$ 53,701	\$ 46,081	\$ 50,647	\$ 51,327	\$ 69,298

Line No.	Description	Reference	April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	Billing Period Twelve Months Ended September 2022
11	Purchased Power Agreements		\$ 284,775	\$ 304,779	\$ 301,933	\$ 299,978	\$ 291,920	\$ 252,056	\$ 2,998,042
12	Shared Solar Program		24,043	25,702	25,435	25,247	24,594	21,274	253,066
13	Total DERP Avoided Costs	Sum Lines 11 - 12	\$ 308,817	\$ 330,481	\$ 327,368	\$ 325,225	\$ 316,514	\$ 273,331	\$ 3,251,108
14	Total Projected System Sales kWhs (w/solar)	Exhibit 7	6,605,549,360	6,323,257,933	7,091,353,562	8,292,665,926	8,744,695,201	8,162,715,217	88,461,197,969
15	DERP Avoided System Cost - (¢/kWh)	Line 13 / Line 14 *100	0.0047	0.0052	0.0046	0.0039	0.0036	0.0033	
16	Projected SC Retail Sales kWh (w/solar)	Exhibit 7	1,670,721,121	1,587,865,456	1,734,682,355	1,998,272,611	2,131,507,681	2,022,434,802	21,680,269,758
17	SC DERP Avoided Costs	Line 15 / 100 * Line 16	\$ 78,108	\$ 82,989	\$ 80,081	\$ 78,369	\$ 77,150	\$ 67,722	\$ 798,751
	SC DERP Avoided Cost Allocated on Firm CP kWhs								
18	Residential	Total Line 17 * Line 1							\$ 350,432
19	General Service / Lighting	Total Line 17 * Line 2							\$ 214,946
20	Industrial	Total Line 17 * Line 3							\$ 233,373
21	Total SC	Sum Lines 18 through 20							\$ 798,751
	Projected SC Retail Sales kWh (October 2021 - September 2022)								
22	Residential	Exhibit 7							6,869,069,305
23	General Service / Lighting	Exhibit 7							5,852,891,838
24	Industrial	Exhibit 7							9,070,560,880
25	Total SC	Sum Lines 22 through 24							21,792,522,023
	SC DERP Avoided Cost ¢/kWh								
26	Residential	Line 18 / Line 22 * 100							0.0051
27	General Service / Lighting	Line 19 / Line 23 * 100							0.0037
28	Industrial	Line 20 / Line 24 * 100							0.0026